west virginia department of environmental protection

Appendix N:
30 Non-EGU Sources

West Virginia Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Promoting a healthy environment.

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Appendix N
Analysis of Non-EGU Controls

Table of Contents

1. West Virginia Greater than 100 tons/year Group N-6

A. Cement Kiln Category N-8

Argos USA, formerly Essroc and Capitol Cement (54-003-00006) N-8

B. By-Product Coke Manufacturing Category N-8

Mountain State Carbon (54-009-00002) N-8

C. ICI Boilers – Coal Category N-8

Bayer Crop Science (54-039-00007) N-8

D. ICI Boilers – Coal/Stoker Category N-9

Chemours, Washington Works (54-107-00001) N-9

E. ICI Boilers – Natural Gas Category N-9

Arcelor Mittal (54-029-00001) N-9

Chemours, Belle (54-039-00001) N-9

2. West Virginia 25 to 100 tpy Group N-10

A. Gas Turbine – Natural Gas Category N-13

Columbia, Frametown (54-007-00100) N-13

Columbia Ceredo (54-099-00013) N-13

B. Mills – Reheating Category N-13

SWVA (54-011-00009) N-13

C. ICI Boilers – Coal/Stoker Category N-13

Chemours, Washington Works (54-107-00001) N-13

Naval Sea Systems, formerly Alliant Techsystems Operations, LLC (54-057-00011) N-14

Ox Paperboard (54-037-00007) N-14

D. ICI Boilers – Natural Gas Category N-14

Arcelor Mittal (54-029-00001) N-14

Bayer Crop Science (54-039-00007) N-15

Chemours, Belle (54-039-00001) N-15

COVESTRO, formerly Bayer Material Science (54-051-00009) N-15
Fibrek Recycling (54-049-00043) N-15
SABIC (54-107-00010) N-15
E. Thermal Dryer Fluidized Bed Category N-16
Marion County Mine (54-049-00019) N-16
Monongalia County Mine (54-061-00016) N-16
Kepler Processing (54-109-00013) N-16
Pinnacle Mining (54-109-00006) N-16

Analysis of Non-EGU Controls

The EPA performed a preliminary analysis to characterize whether there are non-EGU source groups with a substantial amount of available cost-effective NO_x emissions reductions achievable. The results of that preliminary analysis are provided in the *Assessment of Non-EGU NO_x Emission Controls, Cost of Controls, and Time for Compliance Final TSD* (TSD)[1] for the CSAPR Update Rule. As EPA noted:

> For the purpose of identifying a list of non-EGU NO_x source groups with controls available, the EPA ran CoST for non-EGU point sources for the 37 eastern U.S. with NO_x emissions of greater than 25 tons/year in 2017. The analysis using CoST was a basis for the review of NO_x control measures for non-EGUs undertaken by two different contractors for EPA. Through a contractual agreement with EPA, SRA International and RTI International provided reports within which CoST examined a number of source categories of non-EGUs with annualized control costs up to $10,000 per ton (in 2011 dollars). These reports are included in the Appendices of this TSD. CoST selected particular control technologies based on application of a least-cost criterion for control measures applied as part of the control strategy. Other NO_x control measures are available for some of these categories, but on average, annualized costs for these measures were at higher cost.[2]

SRA was provided with the outputs from EPA's CoST scenario identifying sources for which NO_x controls were available at a cost-effectiveness level of less than $10,000 per ton. Source identifiers, control technology, baseline emissions and estimates of NO_x emission reductions were included in the CoST outputs. The CoST results were divided into two groups – greater than (>) 100 tons per year (tpy), and 25 to 100 tpy. There were 547 sources in the > 100 tpy group, and 1,280 sources in the 25 to 100 tpy group. EPA included two spreadsheets in the docket for the CSAPR Update Rule, which identify the sources in the >100 tpy[3] and the 25 to 100 tpy[4] groups.

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[1] EPA, *Assessment of Non-EGU NOx Emission Controls, Cost of Controls, and Time for Compliance Final TSD*, August 2016. (Docket ID No. EPA-HQ-OAR-2015-0500-0508) https://www.regulations.gov/searchResults?rpp=25&po=0&s=EPA-HQ-OAR-2015-0500-0508&dct=SR
[2] Ibid., p. 9.
[3] Docket ID No. EPA-HQ-OAR-2015-0500-0090
[4] Docket ID No. EPA-HQ-OAR-2015-0500-0089

The TSD also presents estimates of the time required to install and implement the control measures, both for comparison to the 2017 compliance timeframe, and for discussion of installation time should such measures be required in the future.

The TSD identified nine (9) sources[5] in West Virginia in the > 100 tpy group, and 21 sources[6] in the 25 to 100 tpy group. The West Virginia sources identified in the >100 ton/year group are listed in Table 8, and in the 25 to 100 tpy group in Table 9 below (as identified in the report). A discussion of the specifics of each source are discussed below.

1. West Virginia Greater than 100 tons/year Group

In the > 100 tpy group, 22 source categories were identified in SRA's analysis, which included the CoST recommendation for NO_x control and the recommendation for changing the CoST control measure assigned and associated emission reduction estimates. A total of nine facilities, from five source categories, were identified in West Virginia. A summary of the West Virginia sources in the > 100 tpy is provided in Table 8.

[5] Ibid, Appendix B, p. 15.
[6] Ibid, Appendix B, p. 30.

Table 8
West Virginia Sources in the >100 tpy Group

Facility ID	Facility Name	Unit	Source Category	CoST Recommended Control	SRA/RTI Recommendation for changes to CoST	SRA/RTI Recommended Control Technology	WV Comments
54-003-00006	Argos USA, formerly Essroc, Capitol Cement		Cement Kiln	Biosolid injection technology	Change to no control	Already controlled	Preheater/Precalciner kiln with LNB
54-009-00002	Mountain State Carbon	Battery #8	By-Product Coke Manufacturing	SNCR	Change to LNB or no control	Control technically or economically infeasible	Battery uses under firing, no additional control feasible
54-029-00001	Arcelor Mittal	Boiler 5	ICI Boilers - Natural Gas	LNB or SNCR	Change to LNB and 60% reduction	LNB and Flue Gas Recirculation	Shutdown
54-039-00007	Bayer Crop Science	Boiler #10	ICI Boilers - Coal	LNB and SCR	No change to CoST recommendation	LNB and SCR	Shutdown
54-039-00007	Bayer Crop Science	Boiler #11	ICI Boilers - Coal	LNB and SCR	No change to CoST recommendation	LNB and SCR	Shutdown
54-039-00007	Bayer Crop Science	Boiler #12	ICI Boilers - Coal	LNB and SCR	No change to CoST recommendation	LNB and SCR	Shutdown
54-039-00001	Chemours – Belle	Boiler 10	ICI Boilers - Natural Gas	LNB and SCR	Change to LNB and 60% reduction	LNB and Flue Gas Recirculation	CO-R40-C-2016-30, 0.20 lb/MMBtu NO_x limit
54-107-00001	Chemours – Washington Works	#5 Boiler	ICI Boilers – Coal/Stoker	SCR	Change to SNCR at 50% reduction	SNCR	Consent Order to shutdown by 12/31/21
54-107-00001	Chemours – Washington Works	#6 Boiler	ICI Boilers – Coal/Stoker	SCR	Change to SNCR at 50% reduction	SNCR	Consent Order to shutdown by 12/31/21

A. Cement Kiln Category

There is one cement kiln in West Virginia, the Argos USA facility located in Berkeley County.

Argos USA, formerly Essroc and Capitol Cement (54-003-00006)

The cement plant was modernized in 2009, a state-of-the-art preheater-precalciner kiln replaced the old kilns. The preheater-precalciner kiln utilizes low-NO_x burners to meet the NO_x requirements of the NO_x SIP Call as set forth in 40 CFR 40. As noted in Table 8, SRA recommended no additional control. See Title V Permit R30-00300006-2017.

B. By-Product Coke Manufacturing Category

There is one by-product coke manufacturing facility in West Virginia, Mountain State Carbon, located in Brooke County.

Mountain State Carbon (54-009-00002)

As noted in Table 8, SRA determined that additional control for the coke battery was technically or economically infeasible. Title V Permit R30-00900002-2015.

C. ICI Boilers – Coal Category

Bayer Crop Science (54-039-00007)

Bayer Crop Science had three coal-fired boilers, each with a design heat input of 360 MMBtu/hr, these boilers have been permanently shutdown. See letter from Vince McCormick, QHSE Manager for the Bayer Institute Site, dated January 30, 2017, notifying DEP of the permanent shutdown and demolition of Boilers #10, #11 and #12. Also see letter from William F. Durham, Director, Division of Air Quality, dated February 3, 2017, making the permits for Boilers #10, #11 and #12 inactive.

D. ICI Boilers – Coal/Stoker Category

Chemours, Washington Works (54-107-00001)

Chemours, Washington Works is subject to Consent Order No. CO-R8-C-2017-17, which requires the replacement of the five-existing coal-fired stoker boilers with combustion units fired by natural gas. Chemours submitted application, R13-3416, for the installation of three natural gas-fired boilers rated at 249 MMBtu/hr on July 27, 2018. The new boilers will be subject to 40 CFR 60, Subpart Db (NSPS for ICI Boilers), 40 CFR 63, Subpart DDDDD (ICI Boiler MACT), as well as state rules. Two of the five Chemours coal-fired boilers were identified in the >100 tpy group, and the remaining 3 were identified in the 25 to 100 tpy group. Chemours is required to permanently cease operation of the five coal-fired boilers by December 31, 2021. See Consent Order CO-R8-C-2017-7.

E. ICI Boilers – Natural Gas Category

Arcelor Mittal (54-029-00001)

HP Boiler 5 was a mixed fuel boiler that burned natural gas, blast furnace gas and #6 fuel oil, that has been permanently shut down. See the Fact Sheet for Title V Permit R30-02900001-2017 (page 3) which notes that HP Boilers 3, 4, and 5 have been decommissioned, therefore they are not included in Arcelor Mittal's current Title V operating permit, R30-02900001-2017.

Chemours, Belle (54-039-00001)

Boiler 10 has a design input of 275 MMBtu/hr. In order to comply with the NO_x SIP Call requirements for boilers with a design heat input greater than 250 MMBtu/hr as set forth in 45 CSR 40, Chemours, Belle entered into Consent Order No. CO-R40-C-2016-30 and is subject to a NO_x limit for Boiler 10 of 0.20 lb/MMBtu during the ozone season. See Consent Order CO-R40-C-2016-30.

2. West Virginia 25 to 100 tpy Group

The same 22 source categories, identified in the > 100 tpy group, were evaluated by SRA for the 25 to 100 tpy group; including the CoST recommendation for NO_x control and the recommendation for changing the CoST control measure assigned and associated emission reduction estimates. A total of 21 facilities, from 5 source categories, were identified in West Virginia. A summary of the West Virginia sources in the 25 to 100 tpy group is provided in Table 9.

Table 9

West Virginia Sources in the 25 to 100 tpy Group

Facility ID	Facility Name	Unit	Source Category	CoST Recommended Control	EPA/SRA Comments	Revised Control Technology Recommendation	WV Comments
54-007-00100	Columbia Frametown	04501	Gas Turbine – Natural Gas	Low NO_x Burners (LNB)	Assume turbines OK for now	LNB	Emergency Standby Unit
54-011-00009	SWVA	Reheat Furnace #1	Mills - Reheating	LNB and Flue gas recirculation (FGR)	Assume reheat furnaces OK for now	LNB and FGR	No Control
54-011-00009	SWVA	Reheat Furnace #2	Mills - Reheating	LNB and FGR	Assume reheat furnaces OK for now	LNB and FGR	No Control
54-029-00001	Arcelor Mittal	Boiler 4	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	Permanently Shutdown
54-037-00007	Ox Paperboard	001	ICI Boilers – Coal/Stoker	SCR	Revise to 50% per LADCO/OTC	SNCR	Current Max 40% capacity factor, DSI, a baghouse; Scheduled Shutdown by 2019
54-039-00001	Chemours Belle	Boiler 6	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	No NO_x Control ICI Boiler MACT
54-039-00001	Chemours Belle	Boiler 14	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	No NO_x Control ICI Boiler MACT
54-039-00001	Chemours Belle	Boiler 15	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	No NO_x Control ICI Boiler MACT
54-039-00007	Bayer Crop Science	040	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	Permanently Shutdown
54-049-00019	Marion County Mine	008	Thermal Dryer – Fluidized Bed	LNB	Assume coal cleaning OK	LNB	Cyclone, Scrubber

Facility ID	Facility Name	Unit	Source Category	CoST Recommended Control	EPA/SRA Comments	Revised Control Technology Recommendation	WV Comments
54-049-00043	Fibrek	001	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	Existing controls: LNB and FGR
54-051-00009	COVESTRO	22A	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	No NO_x Control ICI Boiler MACT
54-057-00011	Naval Sea Systems	034	ICI Boilers – Coal/Stoker	SNCR	Revise to 50% per LADCO/OTC	SNCR	Permanently Shutdown
54-061-00016	Monongalia County Mine	008	Thermal Dryer – Fluidized Bed	LNB	Assume coal cleaning OK	LNB	Cyclone, Scrubber
54-099-00013	Columbia Ceredo	0509	Gas Turbines – Natural Gas	LNB	Assume turbines OK for now	LNB	Permanently Shutdown
54-107-00010	SABIC	BH4	ICI Boilers – Natural Gas	LNB and SCR	Natural gas assume 60% per LADCO/OTC	LNB and FGR	Permanently Shutdown
54-107-00001	Chemours, Washington Works	P02	ICI Boilers – Coal/Stoker	SCR	Revise to 50% per LADCO/OTC	SNCR	Consent Order to shutdown by 12/31/21
54-107-00001	Chemours, Washington Works	P03	ICI Boilers – Coal/Stoker	SCR	Revise to 50% per LADCO/OTC	SNCR	Consent Order to shutdown by 12/31/21
54-107-00001	Chemours, Washington Works	P04	ICI Boilers – Coal/Stoker	SCR	Revise to 50% per LADCO/OTC	SNCR	Consent Order to shutdown by 12/31/21
54-109-00013	Kepler Processing Plant	006	Thermal Dryer – Fluidized Bed	LNB	Assume coal cleaning OK	LNB	Cyclone, Scrubber, Mist Eliminator, 15% NO_x control
54-109-00006	Pinnacle Mining	001	Thermal Dryer – Fluidized Bed	LNB	Assume coal cleaning OK	LNB	Cyclone, Scrubber, Mist Eliminator, 15% NO_x control

A. Gas Turbine – Natural Gas Category

Columbia, Frametown (54-007-00100)

Compressor engine 04501 is a Rolls Royce Avon 1533-76G Turbine Engine/Centrifugal Compressor rated at 12,500 hp, installed in 1969. Compressor engine 04501 has been moved to "emergency standby" status and is limited to 2,000 hours/year of operation, and 49.5 tons/year of NO_x emissions. The engine has not operated since 2015. See the Engineering Evaluation/Fact Sheet for permit R13-2234A, and permit R13-2234A.

Columbia Ceredo (54-099-00013)

Compressor engine 00509 was a General Electric 3112K compressor turbine, rated at 12,500 hp, installed in 1971. Permit R13-1856A was issued for the replacement of two compressor engines, including engine 00509. See the Engineering Evaluation/Fact sheet for R13-1856A. Engine 00509 has been permanently shutdown and removed from the current Title V operating permit. See Title V Permit R30-099-00013-2016.

B. Mills – Reheating Category

SWVA (54-011-00009)

SWVA is equipped with two natural gas-fired reheat furnaces. Furnace 1 is rated at 96 MMBtu and was installed in 1984. Furnace 2 is rated at 130 MMBtu/hr and was installed in 1997. There are no existing controls on the reheat furnaces. See Title V Permit R30-01100009-2015.

C. ICI Boilers – Coal/Stoker Category

Chemours, Washington Works (54-107-00001)

Chemours, Washington Works is subject to Consent Order No. CO-R8-C-2017-17, which requires the replacement of the five-existing coal-fired stoker boilers with combustion units fired by natural gas. Chemours submitted application, R13-3416, for the installation of three natural gas-fired boilers rated at 249 MMBtu/hr on July 27, 2018. The new boilers will be subject to 40 CFR 60, Subpart Db (NSPS for ICI Boilers), 40 CFR 63, Subpart DDDDD (ICI Boiler MACT), as well as

state rules. Two of the five Chemours coal-fired boilers were identified in the >100 tpy group, and the remaining 3 were identified in the 25 to 100 tpy group. Chemours is required to permanently cease operation of the five coal-fired boilers by December 31, 2021. See Consent Order CO-R8-C-2017-7.

Naval Sea Systems, formerly Alliant Techsystems Operations, LLC (54-057-00011)

Naval Sea Systems operated three boilers, one coal-fired boiler (#17) rated at 51 MMBtu/hr, and two oil-fired boilers (#15 and #16), rated at 78 MMBtu/hr, each. These boilers were replaced with ten natural gas-fired boilers, each rated at 12 MMBtu/hr. Eight of the boilers are projected to operate during the winter months, three during the warmer months and two to operate as backup. See Permit R13-3186 and the Engineering Evaluation/Fact Sheet. Coal-fired boiler 17, as well as oil-fired boilers 15 and 16, have been permanently shut down, and removed from the current Title V operating permit, R30-05100011-2014.

Ox Paperboard (54-037-00007)

Ox Paperboard operates a coal-fired boiler with a design heat input of 112 MMBtu/hr, which is equipped with activated carbon injection system and a baghouse, for mercury and particulate matter control. Ox Paperboard is required to limit the annual capacity of the boiler to no more than 40 percent by limiting the annual fuel usage to 15,000 tons on 12-month rolling total. See Title V permit R30-03700007-2017.

SRA recommended the installation of SNCR, however, Ox Paperboard has chosen to shutdown the coal-fired boiler and install a natural gas-fired boiler. On August 6, 2018, Ox Paperboard submitted permit application R13-0622B, for the installation of a 58.8 MMBtu/hr natural gas-fired boiler to replace the coal-fired boiler. Proposed startup is November 2018. The coal-fired boiler will be permanently shutdown upon start-up of the natural gas-fired boiler.

D. ICI Boilers – Natural Gas Category

Arcelor Mittal (54-029-00001)

HP Boiler 4 was a mixed fuel boiler that burned natural gas, blast furnace gas and #6 fuel oil, that has been permanently shut down. See the Fact Sheet for Title V Permit R30-02900001-2017 (page

3) which notes that HP Boilers 3, 4, and 5 have been decommissioned, therefore they are not included in Arcelor Mittal's current Title V operating permit, R30-02900001-2017.

Bayer Crop Science (54-039-00007)

Unit ID 040, 480 No. 3 Gas boiler. Natural gas-fired boiler. The boiler was permanently shutdown in 2012. Documentation for Bayer Crop Science is provided below under ICI BOILER – COAL.

Chemours, Belle (54-039-00001)

Boilers 6, 14 and 15 are natural gas-fired steam generating boilers with design heat inputs of 240 MMBtu/hr each, installed in 1940, 1941 and 1944, respectively. The boilers are subject to the annual tune-up requirements of the ICI Boiler MACT. See Title V Permit R30-03900001-2018.

COVESTRO, formerly Bayer Material Science (54-051-00009)

Boiler 10 is a natural gas-fired boiler with a design heat input of 171 MMBtu/hr, which was installed in 1971. The boiler is subject to the annual tune-up requirements of the ICI Boiler MACT. See Title V Permit R30-05100009-2013.

Fibrek Recycling (54-049-00043)

Fibrek operates a natural gas-fired boiler with a design heat input of 186 MMBtu/hr which was installed in 1994. The boiler is equipped with LNB and FGR, and has a permit limit of 18.55 lb/hr. See Permit R13-1525, A.1.

SABIC (54-107-00010)

Facility permanently shutdown. Letter dated August 13, 2015. Company surrendered its Title V permit and all Rule 13 permits.

E. Thermal Dryer Fluidized Bed Category

Marion County Mine (54-049-00019)

Thermal dryer equipped with a horizontal venturi scrubber and cyclone. The dryer has a permitted NO_x limit of 63.6 lbs/hr and 190.8 tpy. Actual NO_x emissions for 2011 – 2017 range between 122 and 152 tons. See Permit R30-04900019-2014.

Monongalia County Mine (54-061-00016)

Thermal dryer equipped with a horizontal venturi scrubber and cyclone. The dryer has a permitted NO_x limit of 46.6 lb/hr and 136 tpy and is limited to a maximum of 5,850 hours of operation per year. Actual NO_x emissions for 2011 – 2017 range between 47 and 95 tons. See Permit R30-06100016-2013.

Kepler Processing (54-109-00013)

Thermal dryer with a maximum heat input of 105 MMBtu/hr. Actual NO_x emissions for 2011 – 2017 range between 61 and 97 tons. See Permit R30-10900013-2018. The company reports a 15% NO_x control efficiency from the installed controls in SLEIS.

Pinnacle Mining (54-109-00006)

Thermal dryer with a NO_x limit of 93.9 lb/hr and 332 tpy. Actual NO_x emissions for 2011 – 2017 range between 110 and 214 tons. See permit R30-10900006-2017. The company reports a 15% NO_x control efficiency from the installed controls in SLEIS.

Non-EGU

Table of Contents

CEMENT KILN **N-19**
Argos USA (54-003-00006) N-21
Permit to Operate (R30-00300006-2017) N-23
BY-PRODUCT COKE MANUFACTURING **N-163**
Mountain State Carbon (54-009-00002) N-165
Permit to Operate (R30-00900002-2015) N-167
ICI BOILERS – NATURAL GAS **N-331**
Arcelor Mittal (54-029-00001) N-333
Permit to Operate (R30-02900001-2015) N-335
Fact Sheet (R30-02900001-2017) N-383
Permit to Modify (R13-3075) N-391
Chemours-Belle (54-039-00001) N-409
Permit to Operate (R30-03900001-2018) N-411
Fibrek (54-049-00043) N-453
Permit to Modify (R13-1525) N-455
COVESTRO (54-051-00009) N-459
Permit to Operate (R30-05100009-2013) N-461
SABIC (54-107-00010) N-579
Closure Letter N-581
ICI BOILERS – COAL **N-585**
Bayer Crop Science (54-039-00007) N-587
WVDEP Letter – Inactive Permits N-589
Bayer Letter – Request for Inactive Permits N-590
Fact Sheet (R30-03900007-2010) N-591
ICI BOILERS – COAL/STOKER **N-597**
Chemours – Washington Works (54-107-00001) N-599
Consent Order (CO-R8-C-2017-17) N-601
Ox Paperboard (54-037-00007) N-605
Permit to Operate (R30-03700007-2017) N-609
Naval Sea Systems (54-057-00011) N-649

Permit to Modify (R13-3186) N-651
Fact Sheet (R13-3186) N-673
GAS TURBINE – NATURAL GAS N-683
Columbia - Frametown (54-007-00100) N-685
Permit to Operate (R30-00700100-2016) N-687
Fact Sheet (R13-2234A) N-721
Columbia Ceredo (54-099-00013) N-733
Permit to Operate (R30-09900013-2016) N-735
Fact Sheet (R13-1856A) N-783
MILLS – REHEATING N-795
SWVA (54-011-00009) N-797
Permit to Operate (R30-01100009-2015) N-799
THERMAL DRYER – FLUIDIZED BED N-849
Marion County Mine (54-049-00019) N-851
Permit to Operate (R30-04900019-2014) N-853
Monongalia County Mine (54-061-00016) N-893
Permit to Operate (R30-06100016-2013) N-895
Kepler Processing Plant (54-109-00013) N-949
Permit to Operate (R30-10900013-2018) N-951
Pinnacle Mining (54-109-00006) N-1003
Permit to Operate (R30-10900006-2017) N-1005

CEMENT KILN

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Argos USA

54-003-00006

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West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Argos USA LLC

R30-00300006-2017

William F. Durham

Director

Issued: October 12, 2017 • Effective: October 26, 2017
Expiration: October 12, 2022 • Renewal Application Due: April 12, 2022

Permit Number: **R30-00300006-2017**
Permittee: **Argos USA LLC**
Mailing Address: **1826 South Queen Street, Martinsburg, WV 25401**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Martinsburg, Berkeley County, West Virginia
Mailing Address:	1826 South Queen Street, Martinsburg, WV 25401
Telephone Number:	(304) 267-8966
Type of Business Entity:	Corporation
Facility Description:	Argos USA LLC's Martinsburg Plant is a Portland cement manufacturing facility. Their cement is used to make concrete, concrete products and masonry cement.
SIC Codes:	Primary 3241; Secondary 1422; Tertiary NA
UTM Coordinates:	243.50 km Easting • 4369.00 km Northing • Zone 18

Permit Writer: Denton B. McDerment

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 4

2.0. General Conditions 20

3.0. Facility-Wide Requirements and Permit Shield 29

Source-specific Requirements

4.0. Modern Preheater-Precalciner Kiln System and related Equipment 60

APPENDIX A Site Specific Monitoring Plan 94

1.0. Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
Modern Precalciner Kiln System and Related Equipment							
Quarry and Crushing EU1							
EP0X.01	Quarry drilling	N/A	4,490,653 TPY	PE			None
EP0X.02	Quarry blasting	N/A	4,490,653 TPY	PE			None
EP0X.03.01	Loader to truck (good rock)	N/A	4,276,653 TPY	PE			None
EP0X.03.02	Loader to truck (waste rock)	N/A	213,841 TPY	PE			None
EP0X.03.03	Truck to waste pile	N/A	213,841 TPY	PE			None
EP37.02.01	Truck(T) to large bin (LB)	2009	4,125,933 TPY	WS		T to LB	None
EP37.02.02	Large Bin (LB) to conveyor (C1)	2009	4,125,933 TPY	WS, PE		LB to C1	None
EP37.03.01	Conveyor (C1) to Feeder (F1)	2009	4,125,933 TPY	CD37.03		C1 to F1	Baghouse
EP37.03.02	Conveyor (C1) to Hammermill (H1)	2009	4,125,933 TPY	CD37.03		C1 to H1	Baghouse
EP37.03.03	Hammermill (H1) to Feeder (F1)	2009	4,125,933 TPY	CD37.03		H1 to F1	Baghouse
EP37.03.04	Feeder (F1) to Conveyor (C2)	2009	4,125,933 TPY	CD37.03		F1 to C2	Baghouse
CD37.03	New Primary Crusher D\C	2009	41,200 dscfm				N/A
EP37.04.01	Conveyor (C2) to Split (SPT1)	2009	4,125,933 TPY	CD37.04		C2 to SPT1	Baghouse
EP37.04.02	Split (SPT1) to Conveyor (C3)	2009	4,125,933 TPY	CD37.04		SPT1 to C3	Baghouse
CD37.04	Crushing System Transfer Tower	2009	4,709 dscfm				N/A
EP37.05	Split (SPT1) to Surge Pile (SP1)	2009	412,593 TPY	None		SPT1 to SP1	None
EP37.06.01	Conveyor (C3) to Split (SPT2)	2009	4,125,933 TPY	CD37.06		C3 to SPT2	Baghouse
EP37.06.02	Split (SPT2) to Top Conveyor (TC1)	2009	3,395,680 TPY	CD37.06		SPT2 to TC1	Baghouse
EP37.06.03	Split (SPT2) to Bottom Conveyor (BC1)	2009	4,125,933 TPY	CD37.06		SPT2 to BC1	Baghouse
CD37.06	Premix Conveying D\C	2009	6,357 dscfm				N/A

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP38.01.01	Top Conveyor (TC1) to Swing Conveyor (SW1)	2009	3,395,680 TPY	CD38.01		TC1 to SW1	Baghouse
EP38.01.02	Swing Conveyor (SW1) to Limestone Pile (LP)	2009	3,395,680 TPY	CD38.01		SW1 to LP	Baghouse
CD38.01	Premix Storage Feeding D\C	2009	2,119 dscfm				N/A
EP37.06	Limestone Crusher Feed Pile (for Finish Mills)	2015	66,138 TPY	None			None
EP37.07	Limestone Crusher Feed Pile Reclaim	2015	66,138 TPY	None		FEL to Crusher	None
EP37.08	Limestone/Clinker Storage Pile (Quarry)	2015	132,276 TPY	None			None
EP37.09	Limestone/Clinker Reclaim from Quarry Storage Pile	2015	132,276 TPY	None		FEL to Truck	None
EP37.10	Truck Dump to Craneway Storage Pile	2015	132,276 TPY	None		Truck to Pile	None
EP37.11	Limestone/Clinker Storage Pile (Outside Craneway)	2015	132,276 TPY	None			None
EP37.12	Limestone/Clinker Transfer to Craneway Storage Building	2015	132,276 TPY	None		FEL to Pile	None
EP37.13	Clinker Transfer from Craneway to Truck	2015	66,138 TPY	None		FEL to Truck	None
EP37.14	Limestone Dump to Mobile Crushers	2016	4,125,933 stons/year	None		FEL to Hopper	None
EP37.15	Mobile Limestone Crushers Operations (1 engine rated at 440 hp and 2 engines rated at 415 hp)	2016	4,125,933 stons/year	None			None
Raw Material Preparation EU2							
EP38.02.01	Pile (LP) to Feeder 1 (FD1)	2009	3,395,680 TPY	CD38.02		LP to FD1	Baghouse
EP38.02.02	Feeder 1 (FD1) to Bottom Conveyor (BC2)	2009	3,395,680 TPY	CD38.02		FD1 to BC2	Baghouse
EP38.02.03	Pile (LP) to Feeder 2 (FD2)	2009	3,395,680 TPY	CD38.02		LP to FD2	Baghouse
EP38.02.04	Feeder 2 (FD2) to Bottom Conveyor (BC2)	2009	3,395,680 TPY	CD38.02		FD2 to BC2	Baghouse
CD38.02	Premix Storage Discharge D\C	2009	2,119 dscfm				N/A
EP39.01.01	Conveyor (BC1) to Split (SPT3)	2009	949,330 TPY	CD39.01		BC1 to SPT3	Baghouse
EP39.01.02	Split (SPT3) to Conveyor (C4)	2009	949,330 TPY	CD39.01		SPT3 to C4	Baghouse
EP39.03.02	Conveyor (C4) to Shale Bin (SB)	2009	730,254 TPY	CD39.01		C4 to SB	Baghouse
EP39.04.01	Conveyor (C4) to Shale Bin 2 (SB2)	2009	730,254 TPY	CD39.01		C4 to SB2	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP39.07.01	Split (SPT3) to Pyrite Silo (P S)	2009	36,513 TPY	CD39.01		SPT3 to PS	Baghouse
EP39.08.01	Split (SPT3) to sand silo (SS)	2009	182,563 TPY	CD39.01		SPT3 to SS	Baghouse
CD39.01	Additive Feeding System D\C	2009	7,416 dscfm				N/A
EP39.03.01	Conveyor (BC2) to Limestone Mix Bin (LMB)	2009	3,395,680 TPY	CD39.02		BC2 to LMB	Baghouse
CD39.02	Limestone Bin D\C	2009	2,119 dscfm				N/A
EP39.03.03	Shale Bin (SB) to Feeder (SBF)	2009	730,254 TPY	CD39.03		SB to SBF	Baghouse
EP39.03.04	Shale Bin Feeder (SBF) to Conveyor (C5)	2009	730,254 TPY	CD39.03		SBF to C5	Baghouse
EP39.02.01	Conveyor (C6) Limestone Mix Bin (LMB) to Feeder (LMBF)	2009	3,395,680 TPY	CD39.03		LMB to LMBF	Baghouse
EP39.02.02	Limestone Mix Feeder (LMBF) to Conveyor (C5)	2009	3,395,680 TPY	CD39.03		LMBF to C5	Baghouse
EP39.07.02	Pyrite Silo (PS) to Feeder (PSF)	2009	36,513 TPY	CD39.03		PS to PSF	Baghouse
EP39.07.03	Pyrite Silo Feeder (PSF) to Conveyor (C5)	2009	36,513 TPY	CD39.03		PSF to C5	Baghouse
EP39.08.02	Sand Silo (SS) to Feeder (SSF)	2009	182,563 TPY	CD39.03		SS to SSF	Baghouse
EP39.08.03	Sand Silo Feeder (SSF) to Conveyor (C5)	2009	182,563 TPY	CD39.03		SSF to C5	Baghouse
CD39.03	Raw Material Discharge D\C1	2009	4,238 dscfm				N/A
EP39.04.02	Shale Silo 2 (SB2) to Feeder (SB2F)	2009	730,254 TPY	CD39.04		SB2 to SB2F	Baghouse
EP39.04.03	High Silo Feeder (HSF) Shale Silo 2 Feeder (SB2F) to Conveyor (C5)	2009	730,254 TPY	CD39.04		SB2F to C5	Baghouse
CD39.04	Raw Material Discharge D\C2	2009	3,178 dscfm				N/A
EP39.05	Additive Truck (T3) to Conveyor (C6)	2009	219,076 TPY	CD39.05		T3 to C6	Baghouse
EP39.04.04	Conveyor (C6) to Conveyor (C7)	2009	219,076 TPY	CD39.05		C6 to C7	Baghouse
CD39.05	Additives Delivery System D\C	2009	29,429 dscfm				N/A
EP40.03	Split to Surge Pile (SP3)	2009		None			
EP39.06.01	Raw Mill Feed Conveyor (C5)	2009	3,651,268 TPY	CD39.06			Baghouse
CD39.06	Raw Mill Feeding D\C	2009	2,119 dscfm				N/A
EP40.01.01	RM Feed Conveyor (C5) to conveyor (C6)	2009	3,651,268 TPY	CD40.01		C5 to C6	Baghouse
EP40.01.02	Conveyor (C6) to Split (SPT4)	2009	3,651,268 TPY	CD40.01		C6 to SPT4	Baghouse
EP40.01.03	Split (SPT4) to Hopper (HP1)	2009	3,651,268 TPY	CD40.01		SPT4 to HP1	Baghouse
EP40.02.03	Bucket Elevator (BE2) to Conveyor (C6)	2009	3,651,268 TPY	CD40.01		BE2 to C6	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP40.04.01	Split (SPT4) to Raw Mill (RM1)	2009	3,651,268 TPY	CD40.01		SPT4 to RM1	Baghouse
CD40.01	Raw Mill High Zone D\C	TBD	9,005 dscfm				N/A
EP40.02.01	Conveyor (C7) to Split (SPT5)	2009	3,651,268 TPY	CD40.02		C7 to SPT5	Baghouse
EP40.02.02	Split (SPT5) to Bucket Elevator (BE2)	2009	3,651,268 TPY	CD40.02		SPT5 to BE2	Baghouse
EP40.04.02	Raw Mill (RM1) to conveyor (C8)	2009	3,651,268 TPY	CD40.02		RM1 to C8	Baghouse
EP40.02.04	Conveyor (C8) to Bucket Elevator (BE2)	2009	3,651,268 TPY	CD40.02		C8 to BE2	Baghouse
CD40.02	Raw Mill Low Zone D\C	2009	7,416 dscfm				N/A
EP40.05	Raw Meal Conveying Equipment	2009	3,651,268 TPY	CD40.05		EP40.05 to EP40.06	Baghouse
CD40.05	Raw Meal Air Slide D\C	2009	4,803 dscfm				N/A
EP40.06	Homogenizing Silo Feeding Equipment	2009	3,651,268 TPY	CD40.06		EP40.06 to EP40.07	Baghouse
CD40.06	Homogenizing Silo Feeding D\C	2009	5,297 dscfm				N/A
EP40.07	Homogenizing Silo Discharging Equipment	2009	3,651,268 TPY	CD40.07		EP40.07 to EP42.02	Baghouse
CD40.07	Homogenizing Silo Discharge D\C	2009	4,238 dscfm				N/A
CD40.08	Top of Homo Silo D\C	2010	2220 dscfm			Raw Feed to Homo Silo	N/A
EP39.07.04	Inert Raw Material Hauling to Quarry (Paved)	2011	882 VMT/year				DSWS
EP39.07.05	Inert Raw Material Hauling to Quarry (Unpaved)	2011	7,055 VMT/year				DSWS
EP39.08	Inert Raw Material Truck Dump to Pile	2011	220,460 ston/yr			Truck to Pile	None
EP39.09	Inert Raw Material Storage Pile (Within Mines)	2011	0.5 acres				PE
EP39.10	Inert Raw Material Pile Reclaim	2011	220,460 ston/yr			Pile to FEL	None
EP39.11	Inert Raw Material Dump to Primary Crusher	2011	220,460 ston/yr			FEL to Crusher	None
EP39.12.01	Hauling to Additives Unloading Bin (Paved)	2011	529 VMT/year				DSWS
EP39.12.02	Hauling to Additives Unloading Bin (Unpaved)	2011	1,058 VMT/year				DSWS
EP39.14	Additives Dump to Pile within Additives Storage Buildings	2015	314,156 TPY	None		Truck to Pile	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP39.15	Additives Storage Building (4 piles)	2015	314,156 TPY	None			None
EP39.16	Reclaim from Additives Piles	2015	314,156 TPY	None		FEL to Hopper	None
Pyroprocessing EU3							
EP42.02	Kiln Feeding Bucket Elevator D\C	2009	3,651,268 TPY	CD42.02		EP42.02 to EP42.03	Baghouse
CD42.02	Kiln Feeding Bucket Elevator D\C	2009	5,297 dscfm				N/A
EP42.03	Kiln Feed Belt	2009	3,651,268 TPY	CD42.03		EP42.03 to EP42.05	Baghouse
CD42.03	Kiln Feeding D\C1	2009	12,713 dscfm				N/A
EP42.04	Kiln System – Inline Raw Mill/PH/PC Kiln/Clinker Cooler	2009	In = 3,651,268 TPY of Kiln Feed Out = 2,212,890 TPY of Clinker	CD42.04			Baghouse
EP42.08	Kiln Bypass Baghouse DC	2009	N/A	CD42.04			Baghouse
EP41.03.01	Coal Mill	2009	292,110 TPY	CD42.04			Baghouse
CD42.04	Inline Raw Mill/PH/PC Kiln/Clinker Cooler & Bypass & Coal Mill D\C	2009	713,986 dscfm				N/A
EP42.05	Kiln Feed Belt	2009	3,651,268 TPY	CD42.05		EP42.05 to EP42.04	Baghouse
CD42.05	Kiln Feeding D\C2	2009	2,119 dscfm				N/A
EP42.01	Bypass Dust Transfer to Existing Cement Silos	2009	176,368 TPY	CD42.01			Baghouse
CD42.01	Cement Fringe Bin D/C	2009	7,662 dscfm				N/A
EP42.06	Lime Storage for Scrubber System	2009	77,161 TPY	CD42.06			Baghouse
CD42.06	Lime Storage D\C	2009	1,000 dscfm				N/A
CD42.07	Bypass Truck Spout Dedusting	2009	294 dscfm	CD42.07			N/A
EP42.07	Bypass Truck Spout Dedusting	2009	N/A	CD42.07			
Clinker Handling and Storage EU4							
EP43.05	Clinker Conveyor to big clinker silo (ClC1)	2009	2,212,890 TPY	CD43.03 CD43.21			Baghouse
CD43.03	Clinker Storage Feeding D\C	2009	7,063 dscfm				N/A

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP43.21	Top of Normal Clinker Silo	2013	2,212,890 TPY	CD43.21			Baghouse
CD43.21	Top of Normal Clinker Silo D/C	2013	8,000 dscfm				N/A
EP43.04	Clinker Conveyor to Clinker Silo (C1C2)	2009	2,212,890 TPY	CD43.04 CD43.19			Baghouse
CD43.04	Small Clinker Storage Feeding D\C	2009	3,178 dscfm-				N/A
EP43.19	Top of LA Clinker Silo	2013	2,212,890 TPY	CD43.19			Baghouse
CD43.19	Top of LA Clinker Silo D/C	2013	6,500 dscfm				N/A
EP43.06.01	Low alkali clinker silo (LACS) to upper conveyors UCS	2009	2,212,890 TPY	CD43.06		LACS to UCS	Baghouse
EP43.06.02	Upper conveyors (UCS) to lower conveyor (LC)	2009	2,212,890 TPY	CD43.06		UCS to LC	Baghouse
EP43.06.03	Low alkali clinker silo to lower conveyor (LC)	2009	2,212,890 TPY	CD43.06		LACS to LC	Baghouse
CD43.06	Small Clinker Storage Discharge D\C	2009	2,119 dscfm				N/A
EP43.07.01	Big clinker silo (BCS) to upper conveyor 1 (UC1)	2009	2,212,890 TPY	CD43.07		BCS to UC1	Baghouse
EP43.07.02	Big clinker silo (BCS) to upper conveyor 2 (UC2)	2009	2,212,890 TPY	CD43.07		BCS to UC2	Baghouse
EP43.07.03	Big clinker silo (BCS) to lower conveyor (LC)	2009	2,212,890 TPY	CD43.07		BCS to LC	Baghouse
EP43.07.04	Big clinker silo (BCS) to short conveyor (SC)	2009	2,212,890 TPY	CD43.07		BCS to SC	Baghouse
EP43.07.05	Short conveyor (SC) to lower conveyor (LC)	2009	2,212,890 TPY	CD43.07		SC to LC	Baghouse
CD43.07	Clinker Storage Discharge D\C	2009	2,119 dscfm				N/A
EP43.08	Upper conveyor 1 (UC1) to FM feed hoppers belt (FM FHB)	2009	2,212,890 TPY	CD43.08		UC1 to FM FHB	Baghouse
CD43.08	Finish Mill Conveying D\C1	2009	2,119 dscfm				N/A
EP43.09	Lower Conveyor (LC) to FM feed hoppers belt (FM FHB)	2009	2,212,890 TPY	CD43.09		LC to FM FHB	Baghouse
CD43.09	Finish Mill Conveying D\C2	2009	2,119 dscfm				N/A
EP43.13	Upper conveyor 2 (UC2) to FM feed hoppers belt (FM FHB)	2009	2,212,890 TPY	CD43.13		UC2 to FM FHB	Baghouse
CD43.13	Finish Mill Conveying D\C3	2009	2,119 dscfm				N/A

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
Fuel Handling EU5							
EP15.01.01	Rail Unloading (RU) to Petcoke Hopper (PH)	1966, 1972, and 2009	116,844 TPY	PE		RU to PH	None
EP15.01.02	Petcoke Hopper (PH) to feeders (PF)	1966, 1972, and 2009	116,844 TPY	PE		PH to PF	None
EP41.01.01	Petcoke feeders (PF) to conveyor (PC1)	2009	116,844 TPY	WS		PF to PC1	None
EP41.01.02	Petcoke conveyor (PC1) to split to conveyor (PC2)	2009	116,844 TPY	WS		PC1 to PC2	None
EP41.01.03	Petcoke Conveyor (PC2) to CSH Fuel Bins (FB) or pile	2009	116,844 TPY	PE		PC2 to FB	None
EP41.01.04	Coal truck unloading (TU) to storage hall (CSH)	2009	175,266 TPY	PE		TU to CSH	None
EP41.01.05	Clam bucket (CB) to coal pile (CP)	2009	175,266 TPY	PE		CB to CP	None
EP41.01.06	Pile (CP) to clam bucket (CB)	2009	292,110 TPY	PE		CP to CB	None
EP41.01.07	Clam bucket (CB) to CSH fuel bins (FB)	2009	292,110 TPY	PE		CB to FB	None
EP41.02.01	CSH Fuel Bins (FB) to feeders (FB FD)	2009	292,110 TPY	PE		FB to FB FD	None
EP41.02.02	Feeders (FB FD) to Conveyor (CM C1)	2009	292,110 TPY	WS		FB FD to CM C1	None
EP41.02.03	Conveyor (CM C1) to split to conveyor (CM C2)	2009	292,110 TPY	WS		CM C1 to CM C2	None
EP41.02.04	Conveyor (CM C2) to Coal Mill (CM)	2009	292,110 TPY	CD42.04		CM C2 to CM	Baghouse
Cement Production EU6							
EP43.14	Conveyor (FM FHB) to clinker feeding hoppers (CFH1/2) (FM 1&2)	2009	2,212,890 TPY	CD43.14		FM FHB to CFH1/2	Baghouse
EP43.15	Conveyor (FM FHB) to lower conveyor (LC2) (FM3)	2009	2,212,890 TPY	CD43.14		FM FHB to LC2	Baghouse
CD43.14	Finish Mill 1 & 2 Hoppers D\C	2009	5,297 dscfm				N/A
EP43.20	Normal Clinker Bin at Pan Conv. 73	2013	2,212,890 TPY	CD43.20			Baghouse
CD43.20	Normal Clinker Bin at Pan Conv. 73 D/C	2013	9,500 dscfm				N/A
EP43.16	Lower conveyor (LC2) to clinker feeding hopper (CFH3) (FM3)	2009	2,212,890 TPY	CD43.16		LC2 to CFH3	Baghouse
CD43.16	Finish Mill 3 Hopper D\C	2009	5,297 dscfm				N/A
EP43.17	Normal Clinker Bin-Bin Vent	2010	2,212,890 TPY	CD43.17			Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
CD43.17	Normal Clinker Bin-Bin Vent D\C	2010	2,793 dscfm			Clinker to Clinker Bin	N/A
EP26.06.03	Gypsum/synthetic gypsum truck unloading (GTU) to storage hall (SH)	2009	150,879 TPY			GTU to SH	None
EP26.06.04	Clam bucket (CB1) to gypsum/synthetic gypsum pile (GP)	2009	150,879 TPY	PE		CB1 to GP	None
EP26.06.05	Gypsum/synthetic gypsum pile (GP) to clam bucket (CB1)	2009	150,879 TPY	PE		GP to CB1	None
EP26.06.06	Clam bucket (CB1) to gypsum/synthetic gypsum bin (GB) (FM1/2/3)	2009	150,879 TPY	PE		CB1 to GB	None
EP26.07.01	Limestone Pile (LP) to clam bucket (CB1)	2009	150,879 TPY	PE		LP to CB1	None
EP26.07.02	Clam bucket (CB1) to limestone bin (LB) (FM1/2/3)	2009	150,879 TPY	PE		CB1 to LB	None
EP27.01	Conveyor (FM FHB) to clinker hopper (CFH1/2)	2009	25,000 TPY	PE		FM FHB to CFH1/2	None
EP27.02	Clinker hopper (CFH1/2) to crane (CB1)	2009	25,000 TPY	PE		CFH1/2 to CB1	None
EP27.03	Crane (CB1) to clinker pile (CP)	2009	25,000 TPY	PE		CB1 to CP	None
EP27.04	Clinker pile (CP) to crane (CB1)	2009	25,000 TPY	PE		CP to CB1	None
EP27.05	Crane (CB1) to clinker bins (CFH1/2 & CFH3) (FM1/2/3)	2009	25,000 TPY	PE		CB1 to CFH1/2 & CFH3	None
EP27.06	Transfer to Outdoor Clinker Storage Pile	2015	55,115 TPY	None		Truck to Pile	None
EP27.07	Outdoor Clinker Storage Pile-Tarped	2015	55,115 TPY	None			None
EP27.08	Outdoor Clinker Storage Pile Reclaim	2015	55,115 TPY	None		FEL to CP	None
EP44.01	L.A. clinker bin (LACB) to FM2 conveyor (FM2C)	2009	2,212,890 TPY	CD44.01		LACB to FM2C	Baghouse
CD44.01	Finish Mill 2 Feeding System D\C1	2009	3,178 dscfm				N/A
EP44.02	Clinker bin (CB) to FM1 conveyor (FM1C)	2009	2,212,890 TPY	CD44.02		CB to FM1C	Baghouse
CD44.02	Finish Mill 1 Feeding D\C1	2009	3,178 dscfm				N/A
EP44.03	Clinker Bin (CB) to FM2 conveyor (FM2C)	2009	2,212,890 TPY	CD44.03		CB to FM2C	Baghouse
CD44.03	Finish Mill 2 Feeding D\C2	2009	2,119 dscfm				N/A
EP44.04.01	Limestone bin (LB) to FM2 conveyor (FM2C)	2009	150,879 TPY	CD44.04		LB to FM2C	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP44.04.02	Gypsum/synthetic gypsum bin (GB) to FM2 conveyor (FM2C)	2009	150,879 TPY	CD44.04		GB to FM2C	Baghouse
CD44.04	Finish Mill 2 Feeding D\C3	2009	3,178 dscfm				N/A
EP44.05.01	Limestone bin (LB) to FM1 conveyor (FM1C)	2009	150,879 TPY	CD44.05		LB to FM1C	Baghouse
EP44.05.02	Gypsum/synthetic gypsum bin (GB) to FM1 conveyor (FM1C)	2009	150,879 TPY	CD44.05		GB to FM1C	Baghouse
CD44.05	Finish Mill 1 Feeding D\C 2	2009	3,178 dscfm				N/A
EP44.06	FM1 conveyor (FM1C) to conveyor (FM1C2)	2009	1,839,600 TPY	CD44.06		FM1C to FM1C2	Baghouse
CD44.06	Finish Mill 1 Conveying D\C	2009	3,178 dscfm				N/A
EP44.07.01	Elevator (EL1) to FM1 conveyor (FM1C2)	2009	1,839,600 TPY	CD44.07 CD44.18		EL1 to FM1C2	Baghouse
EP44.07.02	FM1 Conveyor (FM1C2) to bin (FM1B)	2009	1,839,600 TPY	CD44.07 CD44.18		FM1C2 to FM1B	Baghouse
EP44.07.03	Conveyor (FM1C2) to Finish Mill 1 (FM1)	2009	1,839,600 TPY	CD44.07 CD44.18		FM1C2 to FM1	Baghouse
CD44.07	Finish Mill 1 High Zone D\C	2009	7,416 dscfm				N/A
EP44.18	Finish Mill 1 Reject Elevator High Zone	2013	1,839,600 TPY	CD44.18			Baghouse
CD44.18	Finish Mill 1 Reject Elevator High Zone D/C	2013	1,500 dscfm				N/A
EP44.08.01	Finish Mill 1 (FM1) to conveyor (FM1C3)	2009	1,839,600 TPY	CD44.08		FM1 to FM1C3	Baghouse
EP44.08.02	Bin (FM1B) to FM1 conveyor (FM1C3)	2009	1,839,600 TPY	CD44.08		FM1B to FM1C3	Baghouse
EP44.08.03	FM1 Conveyor (FM1C3) to bucket elevator (EL1)	2009	1,839,600 TPY	CD44.08		FM1C3 to EL1	Baghouse
CD44.08	Finish Mill 1 Low Zone D\C	2009	4,238 dscfm				N/A
EP44.09	Finish Mill 1	2009	1,839,600 TPY	CD44.09			Baghouse
CD44.09	Finish Mill 1 D\C	2009	76,515 dscfm				N/A
EP44.13	Finish Mill 1 Conveying	2009	1,839,600 TPY	CD44.13			Baghouse
CD44.13	Finish Mill 1 Discharge D\C	2009	2,119 dscfm				N/A
EP44.14	FM2 Conveyor (FM2C) to conveyor (FM2C2)	2009	1,839,600 TPY	CD44.14		FM2C to FM2C2	Baghouse
CD44.14	Finish Mill 2 Conveying D\C	2009	3,178 dscfm				N/A
EP44.10.01	FM2 Elevator (EL2) to conveyor (FM2C2)	2009	1,839,600 TPY	CD44.10 CD44.19		EL2 to FM2C2	Baghouse
EP44.10.02	FM2 Conveyor (FM2C2) to bin (FM2B)	2009	1,839,600 TPY	CD44.10 CD44.19		FM2C2 to FM2B	Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP44.10.03	Conveyor (FM2C2) to Finish Mill 2 (FM2)	2009	1,839,600 TPY	CD44.10 CD44.19		FM2C2 to FM2	Baghouse
CD44.10	Finish Mill 2 High Zone D\C	2009	7,416 dscfm				N/A
EP44.19	Finish Mill 2 Reject Elevator High Zone	2013	1,839,600 TPY	CD44.19			Baghouse
CD44.19	Finish Mill 2 Reject Elevator High Zone D/C	2013	1,500 dscfm				N/A
EP44.11.01	Finish Mill 2 (FM2) to conveyor (FM2C3)	2009	1,839,600 TPY	CD44.11		FM2 to FM2C3	Baghouse
EP44.11.02	Bin (FM2B) to FM2 conveyor (FM2C3)	2009	1,839,600 TPY	CD44.11		FM2B to FM2C3	Baghouse
EP44.11.03	FM2 Conveyor (FM2C3) to bucket elevator (EL2)	2009	1,839,600 TPY	CD44.11		FM2C3 to EL2	Baghouse
CD44.11	Finish Mill 2 Low Zone D\C	2009	4,238 dscfm				N/A
EP44.12	Finish Mill 2	2009	1,839,600 TPY	CD44.12			Baghouse
CD44.12	Finish Mill 2 D\C	2009	76,515 dscfm				N/A
EP44.15	Finish Mill 2 conveying	2009	1,839,600 TPY	CD44.15			Baghouse
CD44.15	Finish Mill 2 Discharge D\C	2009	2,119 dscfm				N/A
EP44.17	Finish Mills Reject Bin	2011		CD44.17			Baghouse
CD44.17	Finish Mills Reject Bin D\C	2011	294 dscfm			Rejects to Reject Bin	N/A
EP44.16	Finish Mill 1/2 Air Heater	2009	19.84 MMBtu/hr	CD44.09 CD44.12			Baghouse
EP19.01Pb	No. 3 Finish Mill Separator (Existing FM10)	1965, 1986, 2009	695,243 TPY	CD19.02			Baghouse
CD19.02	Finish Mill 3 Baghouse D\C	1986, 2009	1,801 dscfm				N/A
EP19.01U	FM3 Feed bins (FM3B) to feeders (FM3F)	1965, 1986, 2009	695,243 TPY	CD19.01		FM3B to FM3F	Baghouse
EP19.01Pa. 01	FM3 Feeders (FM3F) to belt conveyor 650	1965, 1986, 2009	695,243 TPY	CD19.01		FM3F to 650	Baghouse
EP19.01Pa. 02	Belt conveyor 650 to FM3	1965, 1986, 2009	695,243 TPY	CD19.01		650 to FM3	Baghouse
EP19.02	Finish Mill 3	1965, 1986, 2009	695,243 TPY	CD19.01			Baghouse
CD19.01	Finish Mill 3 Norblo D\C	1986, 2009	20,000 dscfm				N/A
Shipping EU7							
EP45.01	Finish Mill 1 airslides (FM1A)	2013	1,839,600 TPY	CD45.01		FM1 to FM1A	Baghouse
CD45.01	Finish Mill 1 Airslides D\C	2013	4,620 dscfm				N/A

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP45.02	Finish Mill 2 airslides (FM2A)	2013	1,839,600 TPY	CD45.02		FM2 to FM2A	Baghouse
CD45.02	Finish Mill 2 airslides D\C	2013	4,620 dscfm				N/A
EP45.03	Finish Mill 1 to cement silos (CS)	2009	1,839,600 TPY	CD45.03		FM1A to CS	Baghouse
CD45.03	Cement Silos Feeding D\C1	2009	3,178 dscfm				N/A
EP45.04	Finish Mill 2 to cement silos (CS)	2009	1,839,600 TPY	CD45.04		FM2A to CS	Baghouse
CD45.04	Cement Silos Feeding D\C2	2009	3,178 dscfm				N/A
EP45.05	Cement Silo A1 & A2	2009	1,810,546 TPY	CD45.05			Baghouse
CD45.05	Cement Silo A1 & A2 D\C	2009	5,062 dscfm				N/A
EP45.06	Cement Silo B1 & B2	2009	1,810,546 TPY	CD45.06			Baghouse
CD45.06	Cement Silo B1 & B2 D\C	2009	5,062 dscfm				N/A
EP45.07	Cement Silo C1 & C2	2009	1,810,546 TPY	CD45.07			Baghouse
CD45.07	Cement Silo C1 & C2 D\C	2009	5,297 dscfm				N/A
EP45.08	Bulk lane loudout 1	2009	1,810,546 TPY	CD45.08		CS to Trucks	Baghouse
CD45.08	Truck Loudout 1 D\C	2009	3,178 dscfm				N/A
EP45.09	Bulk lane loadout 2	2009	1,810,546 TPY	CD45.09		CS to Trucks	Baghouse
CD45.09	Truck Loadout 2 D\C	2009	2,825 dscfm				N/A
EP45.10	Bulk lane loadout 3	2009	1,810,546 TPY	CD45.10		CS to Trucks	Baghouse
CD45.10	Truck Loadout 3 D\C	2009	2,825 dscfm				N/A
EP45.11	Bulk lane loadout 4	2009	1,810,546 TPY	CD45.11		CS to Trucks	Baghouse
CD45.11	Truck Loadout 4 D\C	2009	3,178 dscfm				N/A
EP45.14	Cement Analyzer	2009	1,810,546 TPY	CD45.14			Baghouse
CD45.14	Cement Analyzer D\C	2009	1,471 dscfm				N/A
EP45.15	Transfer Airslide at the Multi Cell	2010	1,810,546 TPY	CD45.15			Baghouse
CD45.15	Transfer Airslide D\C at the Multi Cell	2010	2,420 dscfm			Cement Transfer to Multi Cell	N/A
EP21.05	Middle Bank Silos 1 DC	2009	2,514,648 TPY	CD21.05			Baghouse
CD21.05	Middle Bank Silos 1 D\C	2009	4,560 dscfm				N/A
EP21.06	Middle Bank Silos 2 DC	2009	2,514,648 TPY	CD21.06			Baghouse
CD21.06	Middle Bank Silos 2 D\C	2009	4,560 dscfm				N/A
EP21.07	Middle Bank Silos 3 DC	2009	2,514,648 TPY	CD21.07			Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
CD21.07	Middle Bank Silos 3 D\C	2009	4,560 dscfm				N/A
EP21.08	Middle Bank Silos 4 DC	2009	2,514,648 TPY	CD21.08			Baghouse
CD21.08	Middle Bank Silos 4 D\C	2009	4,560 dscfm				N/A
EP21.09	Middle Bank Silos 5 DC	2009	2,514,648 TPY	CD21.09			Baghouse
CD21.09	Middle Bank Silos 5 D\C	2009	4,560 dscfm				N/A
EP21.10	Middle Bank Bin Vent 1 - Silos Inlet	2009	2,514,648 TPY	CD21.10			Baghouse
CD21.10	Middle Bank Vent 1 D\C	2009	1,615 dscfm				N/A
EP21.11	Middle Bank Bin Vent 2 - Silos Inlet	2009	2,514,648 TPY	CD21.11			Baghouse
CD21.11	Middle Bank Vent 2 D\C	2009	1,615 dscfm				N/A
EP21.12	Middle Bank Bin Vent 3 - Silos Discharge	2013	2,514,648 TPY	CD21.12			Baghouse
CD21.12	Middle Bank Vent 3 D\C	2013	350 dscfm				N/A
EP21.13	Middle Bank Bin Vent 4 - Silos Discharge	2013	2,514,648 TPY	CD21.13			Baghouse
CD21.13	Middle Bank Vent 4 D\C	2013	350 dscfm				N/A
EP22.05	West Bank Silo #70/71	2014	2,514,648 TPY	CD22.05			Baghouse
CD22.05	West Bank Silos #70/71 D\C	2014	7,357 dscfm				N/A
EP22.06	West Bank Silo #72	2014	2,514,648 TPY	CD22.06			Baghouse
CD22.06	West Bank Silos #72 D\C	2014	7,357 dscfm				N/A
EP22.07	West Bank Silo #84	2014	2,514,648 TPY	CD22.07			Baghouse
CD22.07	West Bank Silos #84 D\C	2014	7,357 dscfm				N/A
EP22.08	West Bank Silo Loadout Spout	2014	2,514,648 TPY	CD22.08			Baghouse
CD22.08	West Bank Silos Loadout Spout	2014	3,200 dscfm				N/A
EP23.01	Packer #1 N.E.	1956, 1971, and 1997	251,465 TPY	CD23.01			Baghouse
CD23.01	N.E. Packer D\C		7,043 dscfm				N/A
EP45.12	Bulk rail loadout 1	2009	2,514,648 TPY	CD45.12			Baghouse
CD45.12	Rail Loadout 1 D\C	2009	2,750 dscfm				N/A
EP45.13	Bulk rail loadout 2	2009	2,514,648 TPY	CD45.13			Baghouse
CD45.13	Rail Loadout 2 D\C	2009	2,750 dscfm				N/A
EP46.01	Truck Loadout Silo 1	2010	1,810,546 TPY	CD46.01			Baghouse
CD46.01	Truck Loadout Silo 1 D\C	2010	3,323 dscfm				N/A

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
EP46.02	Truck Loadout Silo 2	2010	1,810,546 TPY	CD46.02			Baghouse
CD46.02	Truck Loadout Silo 2 D\C	2010	7,283 dscfm				N/A
EP46.03	Truck Loadout Silo 3	2010	1,810,546 TPY	CD46.03			Baghouse
CD46.03	Truck Loadout Silo 3 D\C	2010	2,503 dscfm				N/A
EP46.04	Truck Loadout Silo 4	2010	1,810,546 TPY	CD46.04			Baghouse
CD46.04	Truck Loadout Silo 4 D\C	2010	2,503 dscfm				N/A
EP46.05	Truck Loadout Silo 5	2010	1,810,546 TPY	CD46.05			Baghouse
CD46.05	Truck Loadout Silo 5 D\C	2010	2,354 dscfm				N/A
EP46.06	Bulk loadout 5 - Truck Loadout Silos	2010	1,810,546 TPY	CD46.06			Baghouse
CD46.06	Truck Loadout 5 D\C	2010	1,791 dscfm				N/A
EP46.07	Bulk loadout 6 - Truck Loadout Silos	2010	1,810,546 TPY	CD46.07			Baghouse
CD46.07	Truck Loadout 6 D\C	2010	1,791 dscfm				N/A
EP20.04	East Bank Silos 1	2009	695,243 TPY	CD20.04			Baghouse
CD20.04	East Bank Silos 1 D\C	2009	3,800 dscfm				N/A
EP20.05	East Bank Silos 2	2009	695,243 TPY	CD20.05			Baghouse
CD20.05	East Bank Silos 2D\C	2009	3,800 dscfm				N/A
EP20.06	East Bank Silos 3	2009	695,243 TPY	CD20.06			Baghouse
CD20.06	East Bank Silos 3D\C	2009	3,800 dscfm				N/A
EP48.01	Packhouse	2009	251,465 TPY	CD48.01			Baghouse
CD48.01	Packhouse D\C	2009	13,449 dscfm				N/A
EP45.16	Rail Transloader (50-hp diesel engine-driven)	2013	219,960 TPY	CD45.16			Baghouse
CD45.16	Rail Transloader D\C	2013	8,200 dscfm				N/A
Other Miscellaneous Sources EU8							
EP31.01	Flyash Tank #1	2009	50,293 TPY	CD31.01			Baghouse
CD31.01	Flyash Tank No.1 D\C	2009	2,401 dscfm				N/A
EP31.02	Bypass Dust Tank	2009	50,293 TPY	CD31.02			Baghouse
CD31.02	Bypass Dust Tank D\C	2009	2,401 dscfm				N/A
EP31.03	Bypass Dust silo/loadout	2009	50,293 TPY	CD31.03			Baghouse
CD31.03	Bypass Dust Loadout D\C	2009	2,943 dscfm				N/A
EP22.09	Dry Flyash Weigh Bin/Alleviator	2009	264,552 TPY	CD22.09			Baghouse

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device[1]
CD22.09	Dry Flyash Bin D\C	2009	2,750 dscfm				N/A
EP0B.01	Administrative Boiler 1	2009	1.66 MMBtu/hr	None			None
EP0B.02	Administrative Boiler 2	2009	1.66 MMBtu/hr	None			None
EP0G.01	Emergency Generator	2009	1000kw	None			None
EP0X.05	Quarry Waste pile	1972	3.1 acres	None			None
EP0X.06	New Crusher feed pile	2009	2 acres	None			None
EP03.01	Storage Bays – 5 piles	1966 and 1971	1.06 acres	PE			None
EP26.05	Gypsum/synthetic gypsum storage pile (Craneway)	2009	0.25 acre	PE			None
EP26.08	Limestone Storage pile (Craneway)	2009	0.25 acre	PE			None
EP15.04.03	Coal storage pile (Craneway)	2009	0.25 acre	PE			None
EP15.04.04	Petcoke Storage Pile (Craneway)	2009	0.25 acre	PE			None
EP14.08	Clinker stockpile (Craneway)	2009	0.1 acre	PE			None
EP25.01	Quarry Haul Roads (new crusher)	2009	4,125,933 TPY	DSWS	None	None	None
EP25.03	Quarry Haul Roads (waste)	2009	213,841 TPY	DSWS	None	None	None
EP25.04.02	Cement Shipments	2009	2,062,011 TPY	DSWS	None	None	None
EP25.05.01	Additive Trucks (unpaved)	2009	219,076 TPY	DSWS	None	None	None
EP25.05.02	Additive Trucks (paved)	2009	219,076 TPY	DSWS	None	None	None
EP25.06.01	Fuel deliveries (unpaved)	2009	175,266 TPY	DSWS	None	None	None
EP25.06.02	Fuel Deliveries (paved)	2009	175,266 TPY	DSWS	None	None	None
EP25.07	Waste Dust Trucks (unpaved)	2009	90,801 TPY	DSWS	None	None	None
EP25.08	Misc. Plant vehicles (unpaved)	2009		DSWS	None	None	None
EP25.09.01	Dry Flyash trucks (For Cement) (unpaved)	2009	50,293 TPY	DSWS	None	None	None
EP25.09.02	Dry Flyash trucks (For Cement) (paved)	2009	50,293 TPY	DSWS	None	None	None
EP25.09.03	Dry Flyash trucks (For Calciner) (unpaved)	2009	264,552 TPY	DSWS	None	None	None
EP25.09.04	Dry Flyash trucks (For Calciner) (paved)	2009	264,552 TPY	DSWS	None	None	None
EP25.10.01	Waste Dust Customer Trucks (unpaved)	2009	35,274 TPY	DSWS	None	None	None
EP25.10.02	Waste Dust Customer Trucks (paved)	2009	35,274 TPY	DSWS	None	None	None

Emission Unit ID	Emission Unit Description	Year Installed or Modified	Design or Nominal Capacity	Control Device	Associated Emissions Points		
					ID No	Transfer Description	Fugitive Dust Control System/ Control Device(1)
EP25.12	Gypsum/Synthetic Gypsum Haul Roads (paved)	2009	150,879 TPY	DSWS	None	None	None
EP25.14	Gypsum/Synthetic Gypsum Haul Road (unpaved)	2009	150,879 TPY	DSWS	None	None	None
EP25.16	Hauling Clinker to Primary Crusher (Paved)	2015	66,138 TPY	DSWS	None	None	None
EP25.17	Hauling Clinker to Primary Crusher (Unpaved)	2015	66,138 TPY	DSWS	None	None	None
EP25.18	Hauling Limestone/Clinker from Quarry to Craneway (Unpaved)	2015	132,276 TPY	DSWS	None	None	None
EP25.19	Hauling Limestone/Clinker from Quarry to Craneway (Paved)	2015	132,276 TPY	DSWS	None	None	None
EP42.06.01	Lime deliveries (unpaved)	2009	77,161 TPY	DSWS	None	None	None
EP42.06.02	Lime deliveries (paved)	2009	77,161 TPY	DSWS	None	None	None
EP50.01	Quarry Diesel Tank	2009	15,000 gal				None
EP50.02	Light Oil Tank	2009	64,500 gal				None
EP50.03	Grinding Aid Tank	2009	10,600 gal				None
EP50.04	Air Entrainment Tank	2009	5,300 gal				None
Alternative Fuel Feeding System							
EP25.15	Alternative Fuel Trucks (Paved)	2015	67,593 TPY	WS			
EP41.04	Alternative Fuel Feeding System	2015	67,593 TPY	CD42.04			Baghouse
CD41.04	Alternative Fuel Feeding System D/C	2015	706 dscfm				
EP41.05	Alternative Fuel Dosing System	2015	67,593 TPY	CD42.04			Baghouse
CD41.05	Alternative Fuel Dosing System D/C	2015	1,413 dscfm				

(1) Transfer points (TP) have the same type of fugitive dust control system as the associated conveyors unless otherwise noted. Fugitive Dust Control System / Control Device abbreviations: FE = Full Enclosure, FE/FE = Full Enclosure in Building, PE = Partial Enclosure, NE = No Enclosure, WT = Water Truck, WS = Water Spray, MD = Minimization of Material Drop, DSWS = Dust Suppressant by Water Spray, DSCS = Dust Suppression by Chemical Stabilization/ Wetting, TBD = To Be Determined, TPH = Tons per hour, VMT = Vehicle Miles Traveled.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R14-0026M	April 8, 2016

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding. **[45CSR§30-5.3.e.3.B. and 45CSR38]**

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect. **[45CSR§30-5.1.e.]**

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. Reserved.

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.7. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. This report is to be submitted no later than July 1 of each year unless directed by DAQ.
[W.Va. Code § 22-5-4(a)(14)]

3.1.8. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to C.F.R. §§ 40-82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to C.F.R. § 40-82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to C.F.R. § 40-82.161.

[40 C.F.R. 82, Subpart F]

3.1.9. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.10. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§7- 3.2 (See Section 3.1.11), 3.3, 3.4, 3.5, 3.6, and 3.7. (See Section 3.1.12).
[45CSR§7-3.1., 45CSR14, R14-0026, B.3., EU1, EU2, CD45.16 (Rail Transloader) in EU7, EU8]

3.1.11. The provisions of Section 3.1.10 (45CSR§7-3.1.) shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2., EU1, EU2, EU8]

3.1.12. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 3.1.15 [45CSR§7-5.1] is required to have a full enclosure and be equipped with a particulate matter control device. Compliance with this streamlined opacity limit for storage structures assures compliance with the storage structures in 40 C.F.R. 63 Subpart LLL, Section 3.1.20 (40 C.F.R. § 63.1345).
[45CSR§7-3.7., EU7, EU8]

3.1.13. Reserved.

3.1.14. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12., EU1, EU2, EU7, EU8]

3.1.15. No person shall cause, suffer, allow, or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means that a particulate capture or suppression system shall be installed to ensure the lowest fugitive particulate emissions reasonably achievable.
[45CSR§7-5.1., 45CSR14, R14-0026, B.3.]

3.1.16. The owner or operator of a plant shall maintain dust control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary dust suppressants shall be applied in relation to stockpiling and general material handling to prevent dust generation and atmospheric entrainment.
[45CSR§7-5.2., 45CSR14, R14-0026, B.3.]

3.1.17. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1.]

3.1.18. Maintenance operations (as defined in 45CSR7) shall be exempt from the provisions of 45CSR§7-4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§7-10.3.]

3.1.19. If your source is an existing or new raw or finish mill, your emission limit is ten percent (10%) opacity.
[45CSR34, 40 C.F.R. §63.1343(b)(1) Table 1, Row 13, 45CSR14, R14-0026, B.10., 40 C.F.R. §60.62(c), 45CSR16, EU2 and EU6]

3.1.20. The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system, raw and finish mills, and each existing raw material dryer, at a facility which is a major source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.
[45CSR34, 40 C.F.R. §63.1345, 45CSR14, R14-0026, B.10., 40 C.F.R. §60.62(c), 45CSR16, EU2, EU3, EU4, EU6, EU7, CD31.01, CD31.02, CD31.03, CD22.09]

3.1.21. The compliance date for any affected existing source subject to any rule requirements that were in effect before December 20, 2006, is June 14, 1999 or startup for sources that commenced construction after March 24, 1998.
[45CSR34, 40 C.F.R. §63.1351(a)(2)]

3.1.22. *Compliance Date.* In accordance with 40 C.F.R. §63.1351(c), the compliance date for existing sources for all requirements which became effective February 12, 2013 will be September 9, 2015. The permittee shall comply with all applicable amended requirements for existing sources under 40 C.F.R. 63, Subpart LLL - "National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry" no later than September 9, 2015.

(a) *General.* The provisions in 40 C.F.R. §63.1343 apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, raw material dryer, and open clinker storage pile. All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. You must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means all operating hours within 30 consecutive kiln operating days excluding periods of startup and shutdown.

(b) *Kilns, clinker coolers, raw mills, and finish mills.* (1) The emissions limits for these sources are shown in Table 1.

Table 1 – Emissions Limits for Kilns, Clinker Coolers, Raw and Finish Mills

If your source is a (an):	And the operating mode is:	And it is located at a:	Your emissions limits are:	And the units of the emissions limit are:	The oxygen correction factor is:
1. Existing Kiln	Normal operation	Major or area source	PM[1] 0.07	lb/ton clinker	NA
			Mercury 55	lb/MM tons clinker	NA
			THC[3,4] 24	ppmvd	7 percent
2. Existing Kiln	Normal operation	Major source	HCl 3	ppmvd	7 percent
3. Existing Kiln	Startup and shutdown	Major or area source	Work practices (§63.1346(g) – Cond. 3.1.24.)	NA	NA
4. New Kiln	Normal operation	Major or area source	D/F[2] 0.2	ng/dscm (TEQ)	7 percent
6. New Kiln	Startup and shutdown	Major or area source	Work practices (§63.1346(g))	NA	NA
7. Existing clinker cooler	Normal operation	Major or area source	PM 0.07	lb/ton clinker	NA
8. Existing clinker cooler	Startup and shutdown	Major or area source	Work practices (§63.1348(b)(9) – Cond. 3.1.25.)	NA	NA

[1] The initial and subsequent PM performance tests are performed using Method 5 or 5I and consist of three test runs.
[2] If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less, this limit is changed to 0.40 ng/dscm (TEQ).
[3] Measured as propane.
[4] Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP.

[45CSR34; 40 C.F.R. §§ 63.6(c), 63.1351(c), 63.1343(a), 63.1343(b)(1), Table 1, Rows 1, 2, 3, 4, 6, 7, and 8, and 63.9(h)(2)(i) *and* (ii); 45CSR14, R14-0026A, B.10.; EP42.04]

3.1.23. *General duty to minimize emissions.* At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40 C.F.R. §63.1348(d)]

3.1.24. **Initial Compliance Requirements for Opacity for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills, and open clinker piles.** If you are subject to the limitations on opacity under 40 C.F.R. §63.1345 (condition 3.1.20.), you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in 40 C.F.R. §63.1349(b)(2) (condition 3.3.3.(2)). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.
[45CSR34; 40 C.F.R. §63.1348(a)(2)]

3.1.25. **Initial Compliance Requirements for D/F.**

(i) If you are subject to limitations on D/F emissions under 40 C.F.R. §63.1343(e) (condition 4.1.5.(b)), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in 40 C.F.R. §63.1349(b)(3) (condition 3.3.3.(3)). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance.

(ii) If you are subject to a D/F emission limitation under 40 C.F.R. §63.1343(e) (condition 4.1.5.(b)), you must demonstrate initial compliance with the temperature operating limits specified in 40 C.F.R. §63.1346 by using the performance test methods and procedures in 40 C.F.R. §63.1349(b)(3)(ii) through (b)(3)(iv) (conditions 3.3.3.(3)(i) through (iv)). The average of the run temperatures will determine the applicable temperature limit.

[45CSR34; 40 C.F.R. §63.1348(a)(3)]

3.1.26. During periods of startup and shutdown you must meet the requirements listed in (1) through (4) of this condition.

(1) During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.

(2) Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.

(3) All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300 degrees Fahrenheit (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.

(4) You must keep records as specified in §63.1355 during periods of startup and shutdown.

[45CSR34; 40 C.F.R. §63.1346(g)]

3.1.27. *Startup and Shutdown Compliance.* All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300 degrees Fahrenheit (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.
[45CSR34; 40 C.F.R. §63.1348(b)(9)]

3.2. Monitoring Requirements

3.2.1. The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of 40 C.F.R. Part 63 Subpart LLL, a written operations and maintenance plan. The affected sources are the Raw Material Preparation (EU2), the Pyroprocessing (EU3), the Clinker Handling and Storage (EU4), the Cement Production (EU6), the Shipping (EU7), and the Other Miscellaneous Sources (EU8). The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits, including fugitive dust control measures for open clinker piles of §§63.1343, 63.1345, and 63.1346. Your operations and maintenance plan must address periods of startup and shutdown.

(2) Corrective actions to be taken when required by Section 3.2.4 [40 C.F.R. §63.1350(f)(3)];

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in line kiln raw mill located at the facility at least once per year.

Failure to comply with any provision of the operations and maintenance plan developed in accordance with 40 C.F.R. §63.1347 is a violation of the standard.

[45CSR34; 40 C.F.R. §§ 63.1347(a) and (b)]

(4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Section 3.1.20 [40 C.F.R. §63.1345]. Such procedures must include the provisions of Section 3.2.1 (4) (i) through (vii) [40 C.F.R. §§ 63.1350(f)(1)(i) through (f)(1)(vii)].

(i) The owner or operator must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to 40 C.F.R part 60 of Chapter I of Title 40. The test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintains that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintains that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A to part 60 of Chapter I of Title 40. The Method 9 test must begin within one hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of Section 3.2.1 (4) (i) through (4) (iv) [40 C.F.R. §§ 63.1350(f)(1)(i) through (f)(1)(iv)] for each such conveying system transfer point located within the building, or for the building itself, according to Section 3.2.1 (4) (vii) [40 C.F.R. §63.1350(f)(1)(vii)].

(vii) If visible emissions from a building are monitored, the requirements of Section 3.2.1 (4) (i) through (iv) [40 C.F.R. §§63.1350(f)(1)(i) through (f)(1)(iv)] apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 10 minutes.

[45CSR34, 40 C.F.R. §63.1350(f)(1), 45CSR14, R14-0026, B.10., EU2, EU3, EU4, EU6, EU7, EU8]

3.2.2. The PH/PC kiln, clinker cooler, and in-line raw mill vent to a common baghouse; the PH/PC kiln alkali bypass gas vents to its own separate baghouse; and the coal mill also vents to its own baghouse. All three of these baghouses then vent to a common main stack. The common main stack will house all applicable CEM devices.

Continuous Compliance for Opacity
If you are subject to the limitations on opacity under 40 C.F.R. §63.1345 (condition 3.1.19.), you must demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in 40 C.F.R. §63.1350(f) based on the maximum 6-minute average opacity exhibited during the performance test period. You must initiate corrective actions within one hour of detecting visible emissions above the applicable limit.

(ii) *COMS.* If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the COMS such that it meets the requirements of 40 C.F.R. §63.1350(f)(4)(i).

If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of 40 C.F.R. §63.1350, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of 40 C.F.R. part 63 and according to PS–1 of appendix B to 40 C.F.R. part 60.

[45CSR§30-12.7., 45CSR34, 40 C.F.R. §§ 63.1348(b)(3), 63.1348(b)(3)(i) and 63.1350(f)(4)(i), 40 C.F.R. §60.64(b)(4), 45CSR16, 45CSR14, R14-0026, B.10., CD44.09, CD44.12]

3.2.3. Reserved.

3.2.4. The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 60 of chapter I of Title 40. The duration of the Method 22 test shall be 6 minutes.

(1) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(2) If visible emissions are observed during the follow-up Method 22 performance test required by condition 3.2.4.(1) from any stack from which visible emissions were observed during the previous Method 22 performance test required by condition 3.2.4., you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to 40 CFR part 60. The duration of the Method 9 test must be 30 minutes.

Corrective actions. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[45CSR34, 40 C.F.R. § 63.1350(f)(2)(i), (ii), and (iii), §63.1350(f)(3), 40 C.F.R. §60.64(b)(4), 45CSR16, 45CSR14, R14-0026, B.10., EU2 and EU6]

3.2.5. If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs 3.2.5.(1) through 3.2.5.(5) and paragraphs (m)(1) through (m)(4) of §63.1350 (condition 3.2.17.) to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of §63.1350 (condition 3.2.15.).

(1) You must install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, coal mill, and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill, coal mill, and/or alkali bypass PM control devices.

(i) The temperature recorder response range must include zero and 1.5 times the average temperatures established according to the requirements in Section 3.3.3 (3) (iv) [40 C.F.R. § 63.1349 (b) (3) (iv)].

(ii) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(iii) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.

(2) You must monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, coal mill, and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill, coal mill, and/or alkali bypass PMCD.

(3) The required minimum data collection frequency must be one minute.

(4) Each hour, calculate the three-hour average temperature for the previous 3 hours of process operation using all of the one-minute data available (*i.e.,* the CMS is not out-of-control.)

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

[45CSR34, 40 C.F.R. §63.1350(g), 45CSR14, R14-0026, B.10., EP42.04]

3.2.6. Reserved.

3.2.7. If you are subject to a limitation on opacity under §63.1345 (condition 3.1.20.), you must conduct required emissions monitoring in accordance with the provisions of paragraphs (1)(i) through (1)(vii) of this condition and in accordance with the operation and maintenance plan developed in accordance with §63.1347 (condition 3.2.1.). You must conduct emissions monitoring in accordance with paragraphs (2)(i) through (2)(iii) of this condition and in accordance with the operation and maintenance plan developed in accordance with 40 C.F.R. §63.1347(a) (condition 3.2.1.). You must also develop an opacity emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of 40 C.F.R. §63.1350 (condition 3.2.15.).

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of Chapter I of Title 40. The performance test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of Chapter I of Title 40, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of Chapter I of Title 40. The Method 9 performance test, of appendix A–4 to part 60 of Chapter I of Title 40, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of Chapter I of Title 40, according to the requirements of paragraphs (1)(i) through (1)(iv) of this condition for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (1)(vii) of this condition.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) of this condition apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2)(i) For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of Chapter I of Title 40. The duration of the Method 22 performance test must be 6 minutes.

(ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (1)(ii) of this condition from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (1)(i) of this condition, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of Chapter I of Title 40. The duration of the Method 9 test must be 30 minutes.

[45CSR34, 40 C.F.R. §§ 63.1350(f)(1)(i) through (vii) and (f)(2)(i) through (iii), 40 C.F.R. §60.64(b)(3), 45CSR16, 45CSR14, R14-0026, B.10., EU2, EU3, EU4, EU6, EU7, CD31.01, CD31.02, CD31.03, CD22.09]

3.2.8. Reserved.

3.2.9. You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 C.F.R Part 63 Subpart LLL subject to the provisions of Section 3.2.9. (1) through (6) [40 C.F.R. §§ 63.1350(o)(1) through (o)(6)].

(1) The Administrator will not approve averaging periods other than those specified in this section, unless the owner or operator documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

(2) If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

(3) You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in Section 3.2.9. (3) (i) through (3) (iii) [40 C.F.R. §§ 63.1350(o) (3) (i) through (o) (3) (iii)]:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

(4) The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

(5) You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of 40 C.F.R. Part 63 Subpart LLL.

(6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of 40 C.F.R. Part 63 Subpart LLL.

[45CSR34, 40 C.F.R. §63.1350(o), 40 C.F.R. §60.64(b)(4), 45CSR16, EU2, EU3, EU4, EU6, EU7, CD31.01, CD31.02, CD31.03, CD22.09]

3.2.10. The requirements under paragraph (f)(2) of §63.1350 (condition 3.2.7.(2)) to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).

(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of §63.1350 (condition 3.2.7.(2)), then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in 40 CFR 63 subpart A and according to PS–1 of appendix B to 40 CFR part 60.

(ii) If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of §63.1350 (condition 3.2.7.(2)), the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of 40 CFR §63.1350 apply.

[45CSR34, 40 C.F.R. §63.1350(f)(4), 40 C.F.R. §60.64(b)(4), 45CSR16, 45CSR14, R14-0026, B.10., EU2 and EU6]

3.2.11. Reserved.

3.2.12. The permittee shall conduct monitoring/Record Keeping/reporting as follows. [Not required for open stockpiles, haulroads and emission sources regulated by 40 C.F.R. Part 63 Subpart LLL.]

a. Visible emission observations shall be conducted weekly for fugitive particulate emission activities identified in Section 1.0 by a certified Method 9 observer during periods of normal operation for a sufficient time interval (but no less than 1 minute) to determine if any of the emission units listed above or emission points have visible emissions and if so, the opacity of the emissions. If any of the emission units listed above or emission points have visible emissions exceeding the regulatory limit of twenty percent (20%) opacity, then a 45CSR7A evaluation shall be conducted immediately

after the violation of the regulatory limit unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR7A evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions.

b. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or 45CSR7A, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

3.2.13. The permittee shall conduct weekly visible emission observations on all dust collectors and the permittee shall maintain instrumentation on all dust collectors for pressure drop observations. The permittee shall maintain records of the maintenance performed on each baghouse. These records shall include all maintenance work performed on each dust collector including the frequency of bag/filter change outs. Records shall state the date and time of each dust collector inspection, the inspection results, and corrective action taken, if any.
[45CSR§30-5.1.c.]

3.2.14. The permittee shall maintain daily records indicating the use of any dust suppressants or any other suitable dust controls measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.2.15. ***Development and submittal (upon request) of monitoring plans***. If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (1) through (4) of this condition. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (n) of 40 C.F.R. §63.1350 and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (p)(5) of §63.1350.

(1) For each continuous monitoring system (CMS) required in 40 C.F.R. §63.1350, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (1)(i) through (iii) of this condition. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (2)(i) through (iii) of this condition.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 C.F.R. §§63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 C.F.R. §§63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

Note: Refer to Appendix A for the Site Specific Monitoring Plan.

[40 C.F.R. §§63.1350(p)(1) through (4); 45CSR34; 40 C.F.R. §60.64(b)(4); 45CSR16]

3.2.16. ***Continuous emissions rate monitoring system.*** You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (1) and (2) of this condition, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit.

(1) You must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury or PM CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.

(2) The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate.

(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.

(4) The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (1) of this condition.

(5) The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.

(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.

(7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (*see* sections 3.1 and 8.3 of Performance Specification 2 in appendix B to 40 CFR Part 60 for a discussion of CD).

(i) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).

(ii) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.

(8) You must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to 40 CFR Part 60 with the exceptions in paragraphs (8)(i) and (8)(ii) of this condition.

(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.

(ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.

(9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (8) of this condition.

(10) You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[40 C.F.R. §§63.1350(n)(1) through (10); 45CSR34]

3.2.17. ***Parameter monitoring requirements***. If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (m)(1) through (4) of 40 C.F.R. §63.1350 by the compliance date specified in 40 C.F.R. §63.1351. You must also meet the applicable specific parameter monitoring requirements in 40 C.F.R. §§63.1350(m)(5) through (m)(11) that are applicable to you.

(1) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must conduct all monitoring in continuous operation at all times that the unit is operating.

(3) Determine the 3-hour block average of all recorded readings.

(4) Record the results of each inspection, calibration, and validation check.

[40 C.F.R. §§63.1350(m)(1) through (4); 45CSR34; 40 C.F.R. §60.64(b)(4); 45CSR16]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary or his duly authorized representative may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted

in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.3.2. Performance test results must be documented in complete test reports that contain the information required by paragraphs (1) through (10) of this condition, as well as all other relevant information. As described in 40 C.F.R. §63.7(c)(2)(i), the site-specific plan to be followed during performance testing must be made available to the Administrator prior to testing, if requested.

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish parameters for monitoring; and

(10) Any other information required by the performance test method.

[45CSR34, 40 C.F.R. §63.1349(a), 45CSR14, R14-0026, B.10., EU2, EU3, EU4, EU6, EU7, CD31.01, CD31.02, CD31.03, CD22.09]

3.3.3. (1) The owner or operator of a kiln and clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You must also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS). Compliance must be demonstrated as specified in Section 3.3.3 (1) (i) through (1) (ix) [40 C.F.R. §§ 63.1349 (b) (1) (i) through (b) (1) (ix)].

(i) For your PM CPMS, you will establish a site-specific operating limit. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp or digital equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You will use the PM CPMS to demonstrate continuous compliance with your operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(A) Your PM CPMS must provide a 4-20 milliamp or digital signal output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps or the monitors digital equivalent.

(B) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to three times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to three times your allowable emission limit.

(C) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp or digital output values from the PM CPMS for the periods corresponding to the compliance test runs (*e.g.*, average all your PM CPMS output values for three corresponding Method 5I test runs).

(ii) Determine your operating limit as specified in paragraphs (b)(1)(iii) through (iv) of this section. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp or digital equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit.

If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You must verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test at least annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(iii) If the average of your three Method 5 or 5I compliance test runs is below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the procedures in (b)(1)(iii)(A) through (D) of this section.

(A) Determine your PM CPMS instrument zero output with one of the following procedures:

(1) Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(*2*) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.

(3) The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (*e.g.*, when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(4) If none of the steps in paragraphs (b)(1)(iii)(A)(*1*) through (*3*) of this section are possible, you must use a zero output value provided by the manufacturer.

(B) Determine your PM CPMS instrument average in milliamps or digital equivalent, and the average of your corresponding three PM compliance test runs, using equation 3.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} X_1 \,, \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Y_1 \qquad \text{(Eq. 3)}$$

Where:

X_1 = The PM CPMS data points for the three runs constituting the performance test.

Y_1 = The PM concentration value for the three runs constituting the performance test.

n = The number of data points.

(C) With your instrument zero expressed in milliamps or a digital value, your three run average PM CPMS milliamp or digital signal value, and your three run PM compliance test average, determine a relationship of lb/ton-clinker per milliamp or digital signal value with Equation 4.

$$R = \frac{Y_1}{(X_1 - z)} \qquad \text{(Eq. 4)}$$

Where:

R = The relative lb/ton-clinker per milliamp or digital equivalent for your PM CPMS.

Y_1 = The three run average lb/ton-clinker PM concentration.

X_1 = The three run average milliamp or digital equivalent output from your PM CPMS.

z = The milliamp or digital equivalent of your instrument zero determined from (b)(1)(iii)(A).

(D) Determine your source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp or digital signal value from Equation 4 in Equation 5, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R} \qquad \text{(Eq. 5)}$$

Where:

O_1 = The operating limit for your PM CPMS on a 30-day rolling average, in milliamps or the digital equivalent.

L = Your source emission limit expressed in lb/ton clinker.

z = Your instrument zero in milliamps, or digital equivalent, determined from (b)(1)(iii)(A).

R = The relative lb/ton-clinker per milliamp, or digital equivalent, for your PM CPMS, from Equation 4.

(iv) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using Equation 6.

$$O_h = \frac{1}{n}\sum_{i=1}^{n} X_i \qquad \text{(Eq. 6)}$$

Where:

X_i = The PM CPMS data points for all runs i.

n = The number of data points.

O_h = Your site specific operating limit, in milliamps or the digital equivalent.

(v) To determine continuous operating compliance, you must record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for

calculations when the source is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps or the digital equivalent) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 7 to determine the 30 kiln operating day average.

$$30 kiln\ operating\ day = \frac{\sum_{i=1}^{n} Hpv_i}{n} \qquad \text{(Eq. 7)}$$

Where:

H_{pvi} = The hourly parameter value for hour i.

n = The number of valid hourly parameter values collected over 30 kiln operating days.

(vi) For each performance test, conduct at least three separate test runs each while the mill is on and the mill is off, under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Conduct each test run to collect a minimum sample volume of 2 dscm for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Calculate the time weighted average of the results from three consecutive runs, including applicable sources as required by (b)(1)(viii), to determine compliance. You need not determine the particulate matter collected in the impingers ("back half") of the Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(vii) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value or digital equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run.

(viii) When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the main exhaust and alkali bypass and/or inline coal mill must be tested simultaneously and the combined emission rate of PM from the kiln and alkali bypass and/or inline coal mill must be computed for each run using Equation 8 of this section.

$$E_{Cm} = \frac{E_K + E_B + E_C}{P} \qquad \text{(Eq. 8)}$$

Where:

E_{Cm} = Combined hourly emission rate of PM from the kiln and bypass stack and/or inline coal mill, lb/ton of kiln clinker production.

E_K = Hourly emissions of PM emissions from the kiln, lb.

E_B = Hourly PM emissions from the alkali bypass stack, lb.

E_C = Hourly PM emissions from the inline coal mill stack, lb.

P = Hourly clinker production, tons.

(ix) The owner or operator of a kiln with an in-line raw mill and subject to limitations on PM emissions shall demonstrate initial compliance by conducting separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating, and calculate the time weighted average emissions. The operating limit will then be determined using 63.1349(b)(1)(i) of this section.

(2) *Opacity tests.* If you are subject to limitations on opacity under 40 C.F.R. 63 Subpart LLL, you must conduct opacity tests in accordance with Method 9 of appendix A–4 to part 60 of Chapter I of Title 40. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (2)(i) through (2)(ii) of this condition. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

(i) There are no individual readings greater than 10 percent opacity;

(ii) There are no more than three readings of 10 percent for the first 1-hour period.

(3) *D/F emissions tests.* If you are subject to limitations on D/F emissions under 40 C.F.R. 63 Subpart LLL, you must conduct a performance test using Method 23 of appendix A–7 to part 60 of Chapter I of Title 40. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass must conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) Average temperatures must be calculated for each run of the performance test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 C.F.R. §63.1346(b).

(4) *THC emissions tests.* If you are subject to limitations on THC emissions, you must operate a CEMS in accordance with the requirements in §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvw and the reference method (RM) is Method 25A of appendix A to part 60 of this chapter.

(5) *Mercury Emissions Tests.* If you are subject to limitations on mercury emissions, you must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of §63.1350(k). The initial compliance test must be based on the first 30 kiln operating days in which the affected source operates using a mercury CEMS or a sorbent trap monitoring system after the compliance date of the rule. See §63.1348(a).

(i) If you are using a mercury CEMS or a sorbent trap monitoring system, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in §63.1350(k)(5).

(ii) Calculate the emission rate using Equation 10 of this section:

$$E_{30D} = k\frac{\sum_{i=1}^{n} C_i Q_i}{P} \qquad \text{(Eq. 10)}$$

Where:

E_{30D} = 30-day rolling emission rate of mercury, lb/MM tons clinker.

C_i = Concentration of mercury for operating hour i, µg/scm.

Q_i = Volumetric flow rate of effluent gas for operating hour i, where C_i and Q_i are on the same basis (either wet or dry), scm/hr.

k = Conversion factor, 1 lb/454,000,000 µg.

n = Number of kiln operating hours in the previous 30 kiln operating day period where both C and Qi qualified data are available.

P = Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

(6) *HCl emissions tests.* For a source subject to limitations on HCl emissions you must conduct performance testing by one of the following methods:

(i)(A) If the source is equipped with a wet scrubber, tray tower or dry scrubber, you must conduct performance testing using Method 321 of appendix A to this part unless you have installed a CEMS that meets the requirements §63.1350(l)(1). For kilns with inline raw mills, testing should be conducted for the raw mill on and raw mill off conditions.

(B) You must establish site specific parameter limits by using the CPMS required in §63.1350(l)(1). For a wet scrubber or tray tower, measure and record the pressure drop across the scrubber and/or liquid flow rate and pH in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average pressure drop, pH, and average scrubber water flow rate for each sampling run in which the applicable emissions limit is met. For a dry scrubber, measure and record the sorbent injection rate in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average sorbent injection rate and average sorbent injection rate for each sampling run in which the applicable emissions limit is met.

(7) *Total Organic HAP Emissions Tests.* Instead of conducting the performance test specified in paragraph (b)(4) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(7)(i) through (v) of §63.1349.

[45CSR34, 40 C.F.R. §§ 63.1349(b)(1), (2), (3)(i) – (iv), (4), (5), (6)(i), and (7), 45CSR14, R14-0026, B.10., 45CSR16, EU2, EU3, EU4, EU6, EU7, CD31.01, CD31.02, CD31.03, CD22.09]

3.3.4. Reserved.

3.3.5. *Performance test frequency.* Except as provided in §63.1348(b), performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit. Performance tests required every 30 months must be completed no more than 31 calendar months after the previous performance test except where that specific pollutant is monitored using CEMS; performance tests required every 12 months must be completed no more than 13 calendar months after the previous performance test. **[45CSR34, 40 C.F.R. §63.1349(c), EP42.04]**

3.3.6. (1) If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under 40 C.F.R. 63 Subpart LLL, the source must conduct a performance test as specified in §63.1349(b) (condition 3.3.3.).

(2) In preparation for and while conducting a performance test required in §63.1349(b) (condition 3.3.3.), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in (2)(i) through (2)(iv) of this condition are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.

(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 C.F.R. Part 63 Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under Section 3.3.6.(2) (i) [40 C.F.R. § 63.1348(c)(2)(i)] must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under Section 3.3.6. (1) [40 C.F.R. §63.1348(c)(1)], including when the planned operational change period would begin.

(ii) The performance test results must be documented in a test report according to Section 3.3.2 [40 C.F.R. §63.1349(a)].

(iii) A test plan must be made available to the Administrator prior to testing, if requested.

(iv) The performance test must be completed within 360 hours after the planned operational change period begins.

[45CSR34, 40 C.F.R. § 63.1348(c)]

3.3.7. *Performance Test Reporting Requirements.*

(1) You must submit the information specified in paragraphs (1) and (2) of this condition no later than 60 days following the initial performance test. All reports must be signed by a responsible official.

i. The initial performance test data as recorded under paragraph (b) of §63.1349.

ii. The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(1), (3), (6), (7), and (8) of §63.1349, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.

(2) As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically to the EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT)
(see http://www.epa.gov/ttn/chief/ert/ert_tool.html/).

[40 C.F.R. §63.1349(d); 45CSR34]

3.3.8. *Conditions of performance tests.* Conduct performance tests under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
[40 C.F.R. §63.1349(e); 45CSR34]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by 40 C.F.R. § 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
[45CSR34, 40 C.F.R. § 63.1355(a)]

3.4.5. The owner or operator shall maintain records for each affected source as required by 40 C.F.R. §§ 63.10(b)(2) and (b)(3); and

(1) All documentation supporting initial notifications and notifications of compliance status under 40 C.F.R. § 63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under 40 C.F.R. § 63.8 (f) (6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

[45CSR34, 40 C.F.R. § 63.1355(b)]

3.4.6. In addition to the recordkeeping requirements in Section 3.4.5 [40 C.F.R. § 63.1355 (b)], the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 C.F.R. § 63.10 (c).
[45CSR34, 40 C.F.R. § 63.1355(c)]

3.4.7. You must keep records of the daily clinker production rates and kiln feed rates.
[45CSR34, 40 C.F.R. § 63.1355(e)]

3.4.8. You must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.
[45CSR34, 40 C.F.R. § 63.1355(f)]

3.4.9. (1) You must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.

(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34, 40 C.F.R. § 63.1355(g)]

3.4.10. For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.
[45CSR34, 40 C.F.R. § 63.1355(h)]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3 pursuant to the limitations and procedures of West Virginia Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. Each owner or operator subject to the requirements of 40 C.F.R. Part 63 Subpart LLL shall comply with the notification requirements in 40 C.F.R § 63.9 as follows:

(1) Initial notifications as required by 40 C.F.R. §§ 63.9 (b) through (d). For the purposes of 40 C.F.R. Part 63 Subpart LLL, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under 40 C.F.R. § 63.9 (b), provided the same information is contained in the permit application as required by 40 C.F.R. § 63.9 (b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of Chapter I of Title 40 and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by 40 C.F.R. §§ 63.7 and 63.9 (e).

(3) Notification of opacity and visible emission observations required by 40 C.F.R. § 63.1349 in accordance with 40 C.F.R. §§ 63.6 (h) (5) and 63.9 (f).

(4) As required by 40 C.F.R. § 63.9 (g), notification of the date that the continuous emission monitor performance evaluation required by 40 C.F.R.§ 63.8 (e) is scheduled to begin.

(5) Notification of compliance status, as required by 40 C.F.R. § 63.9(h).

(6) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of §§63.7(b) and 63.9(e) do not apply to retesting required for exceedances under this subpart.

[45CSR34, 40 C.F.R. § 63.1353 (b)]

3.5.11. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 C.F.R. § 63.10 of the general provisions of 40 C.F.R. Part 63 Subpart A as follows:

(1) As required by 40 C.F.R. § 63.10 (d) (2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by 40 C.F.R. § 63.10 (d) (3), the owner or operator of an affected source shall report the opacity results from tests required by 40 C.F.R. § 63.1349.

(3) As required by 40 C.F.R. § 63.10 (d) (4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under 40 C.F.R. § 63.6 (i) shall submit such reports by the dates specified in the written extension of compliance.

(4) Reserved.

(5) Reserved.

(6) As required by 40 C.F.R § 63.10 (e) (2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 C.F.R § 63.8 (e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by 40 C.F.R § 63.10 (e) (2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 C.F.R § 63.7 and described in 40 C.F.R § 63.6 (d) (6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 C.F.R § 63.8 (e).

(8) As required by 40 C.F.R § 63.10 (e) (3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The reports must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. The report must contain the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in Sections 4.1.6., and 4.1.7. [40 C.F.R §§63.1346(a) and (b)];

(ii) Notification of any failure to calibrate thermocouples and other temperature sensors as required under Section 3.2.5(1)(iii) [40 C.F.R §63.1350(g)(1)(iii)]; and

(iv) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under Section 3.2.1.(3) [40 C.F.R §63.1347(a)(3)].

(v) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a).

(vi) For each PM CPMS, HCl, Hg, and THC CEMS, D/F temperature monitoring system, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.

(vii) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

(viii) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, you must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (b)(9) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(ix) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(x) All reports required by this subpart not subject to the requirements in paragraphs (b)(9) introductory text and (b)(9)(viii) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (*e.g.*, by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (b)(9) introductory text and (b)(9)(viii) of this section in paper format.

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

[45CSR34, 40 C.F.R. § 63.1354(b)]

3.5.12. Reporting a failure to meet a standard due to a malfunction. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by §63.1354(b)(9) (condition 3.5.11.(9)). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1348(d) (condition 3.1.23.), including actions taken to correct a malfunction.
[45CSR34, 40 C.F.R. § 63.1354(c)]

3.6. Compliance Plan

3.6.1. Reserved.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

40 C.F.R. Part 60 Subpart LL (August 24, 1982)	Standards of Performance for Metallic Mineral Processing do not apply because lime or limestone is not a metallic mineral.
40 C.F.R. Part 60 Subpart UUU (April 23, 1986)	Standards of Performance for Calciners and Dryers in Mineral Industries do not apply because lime or limestone is not listed as a mineral processed or produced in a mineral processing plant.
40 C.F.R. Part 72 (01/11/93)	Acid Rain Program General Provisions does not apply to the permittee because it is not considered a Title IV (Acid Rain) Source.
40 C.F.R. Part 64 – *Compliance Assurance Monitoring (CAM).*	The first rule applicability criterion at 40 C.F.R. §64.2(a)(1) states that "*The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of this section;*" 40 C.F.R. §64.2(b)(1)(i) grants an exemption from CAM, on a pollutant-specific basis, to emission units that are subject to "*Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.*" According to Attachment H of the renewal application, all emission units at the plant are subject to one of the following federal regulations: NSPS Subpart OOO, NSPS Subpart Y, NSPS Subpart F, and NESHAP MACT Subpart LLL. Since these regulations were proposed after November 15, 1990, all of the emission units qualify for the exemption at 40 C.F.R. §64.2(b)(1)(i) and are therefore not subject to requirements of 40 C.F.R. Part 64 for their respective emissions of particulate matter and HAPs. The permittee's SO_2 scrubber is an air pollution control device. The SO_2 scrubber is part of the kiln system which is regulated by 40 C.F.R. 63 Subpart LLL, and therefore, according to the permittee's renewal application, is exempt from 40 C.F.R. Part 64. However, this is not a correct conclusion because it overlooks the fact that CAM applies to a *Pollutant-specific emissions unit,* which means an emissions unit is considered separately with respect to each regulated air pollutant (cf. §64.1). Thus, specific pollutants regulated by MACT Subpart LLL are exempt from CAM, but not necessarily other pollutants emitted from the same source that may meet the applicability criteria under §§64.2(a)(1) through (3). Emissions of SO_2 from the kiln system meet all three applicability criteria at §§64.2(a)(1) through (3). However, the kiln system exhausts to the Main Stack which is equipped with a Continuous Emission Monitor (CEM) for monitoring SO_2, NO_x, CO, and THC. Operation of the CEM for these pollutants is required by underlying permit R14-0026M, condition B.11., which is already specified in the current Title V permit as condition 4.2.4. Therefore, the exemption criterion at 40 C.F.R. §64.2(b)(1)(vi) is met for SO_2, NO_x, CO, and THC and the kiln system is exempt from CAM on a pollutant-specific basis for these pollutants. While the permittee's PH/PC kiln has potential VOC emissions over 100 tons per year, and it has a VOC limit (permit # R14-0026M, condition A.17.), it does not use a control device to meet the limitation. According to technical correspondence (8/30/2010 email from permittee), it was outlined in Section 4 (Control Technology Analyses) of the September 2009 application for NSR Permit, that the best available control technology for VOC was determined to be good combustion practices. Further, according to the definition of *Control device* at 40 C.F.R. §64.1, "For purposes of this part, a control device does not include … the use of combustion or other process design features or characteristics". Without a control device the applicability criterion at 40 C.F.R. §64.2(a)(2) is not met and CAM does not apply on a pollutant-specific basis to VOC emitted from the PH/PC kiln.

40 C.F.R. 97 Subparts AAAAA, BBBBB, and CCCCC – Transport Rule (TR)	The Martinsburg Plant is not subject to 40 CFR 97 Subparts AAAAA, BBBBB, or CCCCC as it does not meet the definition of an affected source under any of the subparts. An affected source is defined as a "stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale."

4.0. Source-Specific Requirements [Modern Preheater-Precalciner Kiln System and related Equipment (EU1 through EU8)]

4.1. Limitations and Standards

PLANT AREAS

The existing and modified parts of the plant is categorized into the following groups:

Group 1: Quarry and Crushing --- EU1
Group 2: Raw Material Preparation --- EU2
Group 3: Pyroprocessing --- EU3
Group 4: Clinker Handling and Storage --- EU4
Group 5: Fuel Handling --- EU5
Group 6: Cement Production --- EU6
Group 7: Shipping --- EU7
Group 8: Other Miscellaneous Sources --- EU8

Facility Wide Requirements

4.1.1. Clinker production from the facility shall not exceed 2,212,890 short tons per year. Compliance with the annual production limit shall be determined using a 12 month rolling total. A 12 month rolling total shall mean the sum of the clinker production at any given time for the previous twelve (12) consecutive calendar months.
[45CSR14, R14-0026, A.1., Preheater-Precalciner Kiln (EP42.04)]

4.1.2. Emissions from the facility shall not exceed the following based on a rolling yearly total. A rolling yearly total shall mean the sum of the emissions at any given time for the previous twelve-(12) consecutive calendar months.

Pollutant	Allowable Emissions (TPY)
$PM_{2.5}$	222.30[1]
PM_{10}	584.65[1]
TSP	927.69[1]
SO_2	4,515.50[1]
NO_x (as NO_2)	4,031.75[1]
CO	4,458.50[1]
VOC	158.78[1]
Fluorides	1.02
Lead	0.08

[1]Includes emissions from operation of two worst case mobile crushers.
[45CSR14, R14-0026, A.2.]

4.1.3. During periods of startup, shutdown and malfunctions, the source shall follow the procedures found in the site specific Operations and Maintenance Plan as required by 40 C.F.R. Part 63 Subpart LLL.
[45CSR34, 40 C.F.R. §63.6(e), 45CSR14, R14-0026, A.3., See Section 3.2.1.]

4.1.4. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used. The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated.

The pump delivering the water, or solution, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.

[45CSR14, R14-0026, A.4.]

4.1.5. Reserved.

4.1.6. The owner or operator of a kiln subject to a D/F emission limitation under 40 C.F.R. § 63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in Section 4.1.7. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under Section 3.1.22. [40 C.F.R. §§ 63.1343 (a) and (b)] must operate the in-line kiln/raw mill, such that:

(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in Section 4.1.7. and established during the performance test when the raw mill was operating is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in Section 4.1.7. and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in Section 4.1.7. and established during the performance test, with or without the raw mill operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

[45CSR34, 40 C.F.R. §63.1346(a), 45CSR14, R14-0026, B.10.]

4.1.7. The temperature limit for affected sources meeting the limits of Section 4.1.6. or Section 4.1.6.(1) through (3) is determined in accordance with Section 3.3.3 (3) (iv) [40 C.F.R. § 63.1349 (b) (3) (iv)].
[45CSR34, 40 C.F.R. §63.1346(b), 45CSR14, R14-0026, B.10.]

4.1.8. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R14-0026 and any amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR14, R14-0026, C.3.]

Group 1 - Quarry and Crushing Requirements - - - EU1

4.1.9. Emissions from the Group 1 point sources shall not exceed the following:

Identification Number	Description	Outlet Loading (gr/dscf)	Existing Or New
CD37.03	New Primary Crusher D\C	0.01	New
CD37.04	Crushing System Transfer Tower D\C	0.01	New
CD37.06	Premix Conveying D\C	0.01	New
CD38.01	Premix Storage Feeding D\C	0.01	New

Emissions from the Group 1 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP0X.01	Quarry Drilling	0.28	0.13
EP0X.02	Quarry Blasting	0.28	0.13
EP0X.03.01	Loader to truck (good rock)	8.07	3.82
EP0X.03.02	Loader to truck (waste rock)	0.40	0.19
EP0X.03.03	Truck to waste pile	0.40	0.19
EP37.06	Limestone Crusher Feed Pile (for Finish Mills)	0.13	0.06
EP37.07	Limestone Crusher Feed Pile Reclaim	0.12	0.06
EP37.08	Limestone/Clinker Storage Pile (Quarry)	0.08	0.04
EP37.09	Limestone/Clinker Reclaim from Quarry Storage Pile	0.25	0.12
EP37.10	Truck Dump to Craneway Storage PIle	0.22	0.10
EP37.11	Limestone/Clinker Storage Pile (Outside Craneway)	0.04	0.02
EP37.12	Limestone/Clinker Transfer to Craneway Storage Bldg	0.22	0.10
EP37.13	Clinker Transfer from Craneway to Truck	0.77	0.37
EP37.14	Limestone Dump to Mobile Crushers[1]	1.73	0.82
EP37.15	Mobile Limestone Crushers Operations[1]	1.54	1.20
EP37.02.01	Truck to large bin	7.79	3.68
EP37.02.02	Large bin to conveyor	2.60	1.23
EP37.05	Split to surge pile	1.04	0.49

[1]Fugitive emissions from operation of two worst case mobile crushers.

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 37.35 tons per year of TSP nor 22.43 tons per year of PM10 based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 4.1.9.

[45CSR14, R14-0026, A.5.]

4.1.10. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, no owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and

(2) Exhibit greater than 7 percent opacity.

[45CSR16, 40 C.F.R. §60.672 (a); 45CSR14, R14-0026, B.8. (EU1, EU2, EU8)]

4.1.11. No owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity (7 percent opacity for units that were constructed after April 22, 2008).
[45CSR16, 40 C.F.R. § 60.672 (b), 45CSR14, R14-0026, B.8. (EU1, EU2, EU8, EP37.15)]

4.1.12. No owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity (12 percent opacity for units that were constructed after April 22, 2008).
[45CSR16, 40 C.F.R. § 60.672(b), 45CSR14, R14-0026, B.1. (EU1, EU2, EU8, EP37.15)]

Group 2 - Raw Material Preparation Requirements - - - EU2

4.1.13. Emissions from the following sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD38.02	Premix Storage Discharge D\C	0.01	New
CD39.05	Additive Delivery System D\C	0.01	New
CD39.01	Additive Feeding System D\C	0.01	New
CD39.02	Limestone Bin D\C	0.01	New
CD39.03	Raw Material Discharge D\C1	0.01	New
CD39.04	Raw Material Discharge D\C2	0.01	New
CD39.06	Raw Mill Feeding D\C	0.01	New
CD40.01	New Raw Mill High Zone D\C	0.01	New
CD40.02	New Raw Mill Low Zone D\C	0.01	New
CD40.05	New Raw Meal Air Slide D\C	0.01	New
CD40.06	New Homo Silo Feeding D\C	0.01	New
CD40.07	New Homo Silo Discharge D\C	0.01	New
CD40.08	Top of Homo Silo D\C	0.01	New

Emissions from the Group 2 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP39.14	Additives dump to pile in Additives Storage Building	0.07	0.03
EP39.15	Additives Storage Building (4 piles)	0.15	0.08
EP39.16	Reclaim from additives pile	0.07	0.03
EP40.03	Split to surge pile	0.00	0.00
EP39.07.04	Inert Raw Material Hauling to Quarry (Paved)	0.09	0.02
EP39.07.05	Inert Raw Material Hauling to Quarry (Unpaved)	13.70	4.04
EP39.08	Inert Raw Material Truck Dump to Pile	0.10	0.05
EP39.09	Inert Raw Material Storage Pile (Within Mines)	0.17	0.08
EP39.10	Inert Raw Material Pile Reclaim	0.10	0.05
EP39.11	Inert Raw Material Dump to Primary Crusher	0.10	0.05
EP39.12.01	Hauling to Additives Unloading Bin (Paved)	0.05	0.01
EP39.12.02	Hauling to Additives Unloading Bin (Unpaved)	2.06	0.61

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 48.06 tons per year of TSP nor 31.73 tons per year of PM10 based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 4.1.13.

[45CSR14, R14-0026, A.9.; 45CSR§7-4.1.]

Group 3 - Pyroprocessing Requirements - - - EU3

4.1.14. Reserved.

4.1.15. The new preheater-precalciner kiln may combust any combination of the following fuels: coal, coal fines, coke, and on site generated petroleum contaminated soils (as outlined in Section 4.1.18.). If the permittee wishes to use alternative fuels including but not limited to tires, wood, paper cardboard, non-PVC plastics, automobile fluff, carpets, non-hazardous liquids/solids, and refuse derived fuels the permittee shall notify the Director in writing of the fuel to be used within thirty (30) days of the use of the fuel. Use of the alternative fuel shall only commence upon the granting of the written consent of the Director.
[45CSR14, R14-0026, A.10., Preheater-Precalciner Kiln (EP42.04)]

4.1.16. The permittee may combust spent carbon, tires and/or roofing shingles in the new preheater-precalciner kiln provided that the permittee shall first conduct or have conducted EPA approved stack tests to determine compliance with the VOC and PM emission limits as set forth in Section 4.1.22. while combusting the fuel in question. Until compliance with the VOC and PM emission limits are verified and written approval is granted by the Director, the permittee may initially only combust the amount of fuel needed to perform the stack test. A stack test protocol and the anticipated test date shall be submitted to this office at least 7 days prior to the date of the stack test. Results of the stack test shall be reported to this office within 30 days of performance of stack test. The changes in fuel, however, will not be subject to NSR/PSD review since the fuel can be accommodated in the new preheater-precalciner kiln and the Permittee has accounted for the criteria pollutant emissions' potential changes in this PSD (R14-0026 Application).
[45CSR14, R14-0026, A.11., Preheater-Precalciner Kiln (EP42.04)]

4.1.17. The new preheater-precalciner kiln may combust fuel oil during startup. Additionally the kiln may combust fuel oil during periods of primary fuel system maintenance or breakdown so long as no emission limits contained in this permit or any applicable rule are exceeded.
[45CSR14, R14-0026, A.12., Preheater-Precalciner Kiln (EP42.04)]

4.1.18. When combusting onsite generated petroleum hydrocarbon contaminated soils the following provisions shall apply:

(a) The petroleum hydrocarbon contaminated soils shall be introduced into the new preheater-precalciner kiln at a maximum rate of 0.25% by weight of the raw material feed to the kilns. Certified records of the amounts (tonnage) of contaminated soil and raw materials utilized per month shall be maintained in accordance with Section 4.1.18 (c).

(b) The new preheater-precalciner kilns shall provide at least a 99.0% destruction efficiency for the petroleum hydrocarbon constituents.

(c) The new preheater-precalciner kilns shall combust only onsite generated petroleum contaminated soils containing fuel oil, gasoline, kerosene, motor oil, hydraulic fluid, lubricants, and/or diesel fuel. The total petroleum hydrocarbon (TPH) concentration of contaminated soil shall not exceed 50,000 mg/kg (ppm by weight) as determined by USEPA Methods 8015 (TPH) and 8020 (BTEX) tests set forth in Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Office of Solid Waste Publication SW-846. The permittee shall sample and analyze the soil prior to utilization in the new preheater-precalciner kilns. Each certified test record shall contain, as a minimum, a description of the soil origin at the plant site, soil quantity, date, TPH concentration, and verification of sampling and analytical method. The aforementioned tests shall be performed at least once for each batch of petroleum contaminated soils burned.

(d) No chlorinated or fluorinated hydrocarbon contaminated soils shall be combusted.

(e) No material defined as hazardous wastes under 47CSR35 or 45CSR25 shall be combusted. Results of TCLP tests and analyses required in Section 4.1.18 (c) shall be submitted to the Director of the Division of Air Quality prior to utilizing the soil in the new preheater-precalciner kiln.

(f) The new preheater-precalciner kilns may combust a maximum of 3,825 tons of petroleum contaminated soil per year based on a 12 month rolling total.

(g) Only petroleum contaminated soils from the permittee's Martinsburg plant property shall be introduced to the new preheater-precalciner kiln.

[45CSR14, R14-0026, A.13., Preheater-Precalciner Kiln (EP42.04)]

4.1.19. Clinker production from the new preheater-precalciner kiln shall not exceed 2,212,890 short tons per year.
[45CSR14, R14-0026, A.15., Preheater-Precalciner Kiln (EP42.04)]

4.1.20. The permittee shall install, operate and maintain a scrubber to reduce SO_2 emissions from the new preheater-precalciner kiln as necessary to meet the emission limits set in condition 4.1.22. of this permit.
[45CSR14, R14-0026, A.14., Preheater-Precalciner Kiln (EP42.04)]

4.1.21. Operation of the existing Kilns 7 and 8 system shall permanently cease after the preheater-precalciner kiln system achieves full production or within 180 days after the preheater-precalciner kiln system first becomes operational whichever comes first. Operation of the existing Kiln 9 system shall permanently cease after the preheater-precalciner kiln system achieves full production or within 180 days after the preheater-precalciner kiln system first becomes operational or before the BART compliance deadline (approximately 2013) whichever comes first.
[45CSR14, R14-0026, A.16., Kilns #7, #8 and #9 (EP10.01, EP11.01 and EP12.01)]

4.1.22. Emissions from the main stack which consists of emissions from the new preheater-precalciner kiln, in-line raw mill, clinker cooler, coal mill and bypass (PH/PC Kiln System) shall not exceed the following:

Source	Pollutant	Allowable	Compliance Method	Averaging Time
PH/PC Kiln System	NOx	3983.2 TPY	CEM	TPY, 12 month rolling total
PH/PC Kiln System	NOx	1745.0 LB/hr	CEM	30-day average (LB/hr)
PH/PC Kiln System	NOx	2.15 lb/ton clinker	CEM/production data	30-day rolling average
PH/PC Kiln System	CO	3960.0 LB/hr	CEM	24-hr average (LB/hr)
PH/PC Kiln System	CO	4425.8 TPY	CEM	TPY, 12 month rolling total
PH/PC Kiln System	VOC	38.7 LB/hr	Stack Test	3-hr average (LB/hr)
PH/PC Kiln System	VOC	154.9 TPY	Stack Test/production data	TPY, 12 month rolling total
PH/PC Kiln System	VOC	0.14 LB/ton clinker	Stack Test /production data	12 month rolling average
PH/PC Kiln System	SO2	3,230.8 TPY	CEM	TPY, 12 month rolling total
PH/PC Kiln System	SO2	2111.3 LB/hr	CEM	3-hr average (LB/hr)
PH/PC Kiln System	SO2	1.50 lb/ton clinker	CEM/production data	30-day rolling average
PH/PC Kiln System	TSP	268.1 TPY	Stack Test / production data	TPY, 12 month rolling total
PH/PC Kiln System	PM_{10}	225.2 TPY	Stack Test / production data	TPY, 12 month rolling total
PH/PC Kiln System	TSP	69.8 LB/hr	Stack Test	Average (3) 1-hr tests
PH/PC Kiln System	PM_{10}	58.6 LB/hr	Stack Test	Average (3) 1-hr tests
PH/PC Kiln System	PM (filterable)	0.07 lb/ton clinker	CPMS[1]	30-day rolling average
PH/PC Kiln System	HCl[3]	3.0 ppmvd at 7% Oxygen	CEM	30-day rolling average
PH/PC Kiln System	THC	24.0 ppmvd at 7% Oxygen[2]	CEM	30-day rolling average

Source	Pollutant	Allowable	Compliance Method	Averaging Time
PH/PC Kiln System	Hg[3]	55.0 lbs/MMton clinker	CEM	30-day rolling average
PH/PC Kiln System	Pb	0.08 TPY	Production data	TPY, 12 month rolling total
PH/PC Kiln System	Fluorides	1.0 TPY	Production data	TPY, 12 month rolling total

[1]Filterable Particulate Matter shall be parametrically monitored with a Continuous Parametric Monitoring System (CPMS) per 40 CFR 63.1350(b). The CPMS will be used to establish a site specific operating limit corresponding to the results of the most recent annual Method 5 or 51 performance test demonstrating compliance with the PM limit. Compliance shall be demonstrated by not exceeding this site-specific operating limit on a 30-kiln operating day CPMS rolling average basis. Any exceedance of the site-specific operating limit requires the Plant to comply with the requirements of 40 CFR 63.1350(b)(ii), including conducting a new PM emissions compliance test within 30 days of the exceedance to verify or re-establish the site specific operating limit. PM exceedances leading to more than four required emissions compliance tests within a 12-month rolling period will constitute a presumptive violation of the PM limit.

[2] In lieu of complying with the THC emissions limit of 24.0 ppmvd corrected to 7 percent oxygen on a 30-day rolling average; the Plant may elect to comply with an alternative limit of 12.0 ppmvd for total organic HAP (O-HAP). O-HAP shall be parametrically monitored with a THC CEMS per 40 CFR 63.1350(j). The THC CEMS will be used to establish a site-specific operating limit corresponding to the most recent O-HAP performance test demonstrating compliance the O-HAP limit.

[3]Per a 1-year extension granted on July 1, 2015 by WV DEP, the Plant must demonstrate compliance with the HCl and Hg emission limits and CEM monitoring requirements by September 9, 2016. Semi-annual reports are required to be submitted documenting the status and timing for meeting the extended compliance date.

[45CSR14, R14-0026, A.17., Preheater-Precalciner Kiln (EP42.04)]

4.1.23. Reserved.

4.1.24. Emissions from the Group 3 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD41.04	Alternative Fuel Feeding System D\C	0.01	New
CD41.05	Alternative Fuel Dosing System D\C	0.01	New
CD42.04	Inline Raw Mill PH-PC Kiln/Clinker Cooler & Bypass & Coal Mill D\Cs	0.01	New
CD42.02	Kiln Feeding Bucket Elevator D\C	0.01	New
CD42.03	Kiln Feeding D\C1	0.01	New
CD42.05	Kiln Feeding D\C2	0.01	New
CD42.01	Cement Fringe Bin D\C	0.01	New
CD42.06	Lime Storage D\C	0.01	New
CD42.07	Bypass Truck Spout Dedusting	0.01	New

Additionally, emissions from the combined above sources shall not exceed 278.97 tons per year of TSP nor 234.44 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 4.1.24.

[45CSR14, R14-0026, A.18.; 45CSR§7-4.1.]

4.1.25. The preheater section of the new PH/PC kiln will be equipped with low-NO_x burners. The precalciner section of the new PH/PC kiln will be designed with low-NO_x and CO technology. The PH/PC kiln shall be equipped with an SNCR NO_x control system in order to comply with a future NO_x limit to be determined by USEPA. **[45CSR14, R14-0026, A.19.]**

4.1.26. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater. **[45CSR§5-3.4., 45CSR14, R14-0026, B.2., Coal Handling Operations, EU5]**

4.1.27. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air. **[45CSR§5-6.1., 45CSR14, R14-0026, B.2., Coal Handling Operations, EU5]**

4.1.28. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment. **[45CSR§5-6.2., 45CSR14, R14-0026, B.2., Coal Handling Operations, EU5]**

4.1.29. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. **[45CSR§10-11.1., 45CSR14, R14-0026, B.5.]**

4.1.30. Reserved.

4.1.31. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 45CSR10 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. **[45CSR§10-9.1, 45CSR14, R14-0026, B.5., and Preheater-Precalciner Kiln (EP42.04)]**

4.1.32. Standard requirements.

Effective May 1, 2009, an owner or operator of any Portland cement kiln subject to 45CSR§40-10 must not operate the kiln during May 1 through September 30 unless the kiln has installed and operates during May 1 to September 30 with low-NO_X burners, mid-kiln firing or alternative control techniques, subject to approval by the Secretary, that achieve at least the same emissions decreases as low-NO_X burners or mid-kiln firing.

[45CSR§40-10.1., Preheater-Precalciner Kiln (EP42.04)]

4.1.33. Mineral acids shall not be released from any type source operation or duplicate source operation or from any air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7. Following table lists the equipment with their allowable stack emission rates for Hydrogen Chloride (HCl) and Sulfuric Acid (H_2SO_4).

Kiln	Pollutant	Allowable Stack Emission Rate Milligrams Per Dry Cubic Meter
Precalciner Kiln	HCl Mist and/or Vapor	210
	Sulfuric Acid Mist	35

[45CSR§7-4.2., 45CSR14, R14-0026, B.3., Preheater-Precalciner Kiln (EP42.04)]

4.1.34. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in 45CSR§10-4.1.

e. Any owner or operator of a manufacturing process source operation(s) which has the potential to emit less than 500 pounds per year of sulfur oxides.

[45CSR§§10-4.1. and 4.1.e., 45CSR14, R14-0026, B.5., EP42.04, EP44.09, EP44.12, EP19.02, EP44.16, EP37.15, EP45.16]

4.1.35. Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in 45CSR10 shall be based on a block three-(3) hour averaging time.
[45CSR§10-4.2., 45CSR14, R14-0026, B.5., EP42.04, EP44.09, EP44.12, EP19.02]

4.1.36. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$R_s = R_t\ (W_s / W_t)$$

Where,

R_s is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

R_t is the total allowable emission rate for the duplicate source operation;

W_s is the operating process weight rate for the source operation(s) vented through the separate stack; and

W_t is the total operating process weight rate for the duplicate source operation.

[45CSR§7-4.8., Preheater-Precalciner Kiln (EP42.04)]

4.1.37. Reserved.

4.1.38. Reserved.

Group 4 - Clinker Handling and Storage Requirements --- EU4

4.1.39. Emissions from the Group 4 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD43.03	Clinker Storage Feeding D\C	0.01	New
CD43.04	Small Clinker Storage Feeding D\C	0.01	New
CD43.06	Small Clinker Storage Discharge D\C	0.01	New
CD43.07	Clinker Storage Discharge D\C	0.01	New
CD43.08	Finish Mill Conveying D\C1	0.01	New
CD43.09	Finish Mill Conveying D\C2	0.01	New
CD43.13	Finish Mill Conveying D\C3	0.01	New
CD43.19	Top of LA Clinker Silo	0.01	New
CD43.20	Normal Clinker Bin at Pan Conv. 73	0.01	New
CD43.21	Top of Normal Clinker Silo	0.01	New

There shall be no Group 4 fugitive sources.

Additionally, emissions from the above point sources shall not exceed 13.25 tons per year of TSP nor 11.25 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 4.1.39.

[45CSR14, R14-0026, A.20.]

Group 5 - Fuel Handling Requirements - - - EU5

4.1.40. There shall be no Group 5 point sources.

Emissions from the Group 5 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP15.01.01	Rail unloading to Petcoke hopper	0.01	0.01
EP15.01.02	Petcoke Hopper to feeders	0.00	0.00
EP41.01.01	Petcoke feeders to conveyor	0.01	0.00
EP41.01.02	Petcoke Conveyor to split to conveyor	0.01	0.00
EP41.01.03	Petcoke Conveyor to CSH Fuel Bins or Pile	0.01	0.00
EP41.01.04	Coal Truck Unloading to Storage Hall	0.03	0.01
EP41.01.05	Clam Bucket to Coal Pile	0.03	0.01
EP41.01.06	Pile to Clam Bucket	0.05	0.02
EP41.01.07	Clam Bucket to CSH Fuel Bins	0.05	0.02
EP41.02.01	CSH fuel bins to feeders	0.04	0.02
EP41.02.02	Feeders to conveyor	0.08	0.04
EP41.02.03	Conveyor to Split to Conveyor	0.08	0.04

Additionally, emissions from the above fugitive sources shall not exceed 0.39 tons per year of TSP nor 0.18 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 4.1.40.

[45CSR14, R14-0026, A.22.; 45CSR§7-4.1.]

4.1.41. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate, any affected facility including associated air pollution equipment in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR16, 40 C.F.R. § 60.11 (d), 45CSR14, R14-0026, B.8.]

4.1.42. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.
[45CSR16, 40 C.F.R. §60.254(a), 45CSR14, R14-0026, B.8., Fuel Handling System EU5 (except EP41.02.04, EP15.04.03, and EP15.04.04)]

Group 6 - Cement Production Requirements - - - EU6

4.1.43. Emissions from the Group 6 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD43.14	Finish Mill 1 & 2 Hoppers D\C	0.01	New
CD43.16	Finish Mill 3 Hopper D\C	0.01	New
CD43.17	Normal Clinker Bin-Bin Vent D\C	0.01	New
CD44.01	Finish Mill 2 Feeding D\C1	0.01	New
CD44.02	Finish Mill 1 Feeding D\C1	0.01	New
CD44.03	Finish Mill 2 Feeding D\C2	0.01	New
CD44.04	Finish Mill 2 Feeding D\C3	0.01	New
CD44.05	Finish Mill 1 Feeding D\C2	0.01	New
CD44.06	Finish Mill 1 Conveying D\C	0.01	New
CD44.07	Finish Mill 1 High Zone D\C	0.01	New
CD44.08	Finish Mill 1 Low Zone D\C	0.01	New
CD44.09	Finish Mill 1 D\C	0.01	New
CD44.13	Finish Mill 1 Discharge D\C	0.01	New
CD44.14	Finish Mill 2 D\C	0.01	New
CD44.10	Finish Mill 2 High Zone D\C	0.01	New
CD44.11	Finish Mill 2 Low Zone D\C	0.01	New
CD44.12	Finish Mill 2 D\C	0.01	New
CD44.15	Finish Mill 2 Discharge D\C	0.01	New
CD44.17	Finish Mills Reject Bin D\C	0.01	New
CD44.18	Finish Mill 1 Reject Elevator High Zone	0.01	New
CD44.19	Finish Mill 2 Reject Elevator High Zone	0.01	New
CD19.02	Finish Mill 3 Baghouse D\C	0.02	Existing

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD19.01	Finish Mill 3 Norblo D\C	0.02	Existing

Emissions from the Group 6 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP26.06.03	Gypsum/Synthetic Gypsum Truck unloading to storage hall	0.07	0.03
EP26.06.04	Clam Bucket to Gypsum/Synthetic Gypsum Pile	0.02	0.01
EP26.06.05	Gypsum/Synthetic Gypsum Pile to Clam Bucket	0.02	0.01
EP26.06.06	Clam bucket to gypsum/synthetic gypsum bin (FM 1/2/3)	0.02	0.01
EP26.07.01	Limestone Pile to Clam Bucket	0.11	0.05
EP26.07.02	Clam Bucket to Limestone Bin (FM1/2/3)	0.11	0.05
EP27.01	Conveyor to clinker Hopper	2.21	1.04
EP27.02	Clinker Hopper to Crane	2.21	1.04
EP27.03	Crane to Clinker pile	2.21	1.04
EP27.04	Clinker pile to Crane	2.21	1.04
EP27.05	Crane to Clinker Bins (FM 1/2/3)	2.21	1.04
EP27.06	Transfer to Outdoor Clinker Storage Pile	0.65	0.31
EP27.07	Outdoor Clinker Storage Pile - Tarped	0.76	0.38
EP27.08	Outdoor Clinker Storage Pile Reclaim	0.65	0.31

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 156.87 tons per year of TSP nor 128.30 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 4.1.43.
[45CSR14, R14-0026, A.24.; 45CSR§7-4.1.]

4.1.44. Emissions from the new Finish Mill 1 & 2 air heater shall not exceed the following:

Pollutant	LB/hr	TPY
CO	1.6	7.2
NO_x	2.8	12.4
TSP	0.5	2.0
SO_2	10.1	44.1
VOC	0.11	0.5
Fluorides	0.005	0.023

[45CSR14, R14-0026, A.26.]

4.1.45. Reserved.

4.1.46. Finish Mill 1 and 2 air heater shall only combust fuel oil, propane or natural gas. Additionally, the Finish Mills 1 and 2 air heater shall not exceed 19.84 MMBTU/hr MDHI.
[45CSR14, R14-0026, A.27.]

Group - 7 Shipping Requirements - - - EU7

4.1.47. Emissions from the Group 7 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD45.01	Finish Mill 1 Airslides D\C	0.01	New
CD45.02	Finish Mill 2 Airslides D\C	0.01	New
CD45.03	Cement Silos Feeding D\C1	0.01	New
CD45.04	Cement Silos Feeding D\C2	0.01	New
CD45.05	Cement Silo A1 & A2 D\C	0.01	New
CD45.06	Cement Silo B1 & B2 D\C	0.01	New
CD45.07	Cement Silo C1 & C2 D\C	0.01	New
CD45.08	Truck Loadout 1 D\C	0.01	New
CD45.09	Truck Loadout 2 D\C	0.01	New
CD45.10	Truck Loadout 3 D\C	0.01	New
CD45.11	Truck Loadout 4 D\C	0.01	New
CD45.14	Cement Analyzer D\C	0.01	New
CD45.15	Transfer Airslide D\C at the Multi Cell	0.01	New
CD46.01	Truck Loadout Silo 1 D\C	0.01	Modified
CD46.02	Truck Loadout Silo 2 D\C	0.02	Existing
CD46.03	Truck Loadout Silo 3 D\C	0.01	Modified
CD46.04	Truck Loadout Silo 4 D\C	0.01	Modified
CD46.05	Truck Loadout Silo 5 D\C	0.01	Modified
CD46.06	Truck Loadout 5 D\C	0.02	Existing
CD46.07	Truck Loadout 6 D\C	0.02	Existing
CD20.04	East Bank Silos 1 DC	0.01	Modified
CD20.05	East Bank Silos 2 DC	0.01	Modified
CD20.06	East Bank Silos 3 DC	0.01	Modified
CD21.05	Middle Bank Silos 1D\C	0.01	Modified
CD21.06	Middle Bank Silos 2D\C	0.01	Modified
CD21.07	Middle Bank Silos 3D\C	0.01	Modified
CD21.08	Middle Bank Silos 4D\C	0.01	Modified
CD21.09	Middle Bank Silos 5D\C	0.01	Modified
CD21.10	Middle Bank Vent 1 D\C	0.01	New
CD21.11	Middle Bank Vent 2 D\C	0.01	New
CD21.12	Middle Bank Vent 3 D\C	0.01	New
CD21.13	Middle Bank Vent 4 D\C	0.01	New
CD22.05	West Bank Silos #70/71 D\C	0.01	Modified
CD22.06	West Bank Silos #72 D\C	0.01	Modified
CD22.07	West Bank Silos #842 D\C	0.01	Modified
CD22.08	West Bank Silos Loadout Spout D\C	0.01	Modified

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD23.01	N.E. Packer D\C	0.02	Existing
CD45.12	Rail Loadout 1 D\C	0.01	New
CD45.13	Rail Loadout 2 D\C	0.01	New
CD48.01	Packhouse D\C	0.01	Modified
CD45.16	Rail Transloader D\C	0.02	New

There shall be no Group 7 fugitive sources.

Additionally, emissions from the above Point sources shall not exceed 68.41 tons per year of TSP nor 58.18 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by the more stringent requirements of Section 4.1.47.
[45CSR14, R14-0026, A.28.; 45CSR§7-4.1.]

4.1.48. Diesel fuel usage by the rail transloader engine shall not exceed 14,560 gallons per year.
[45CSR14, R14-0026, A.30.]

4.1.49. Emissions from the rail transloader engine shall not exceed the following:

	lb/hr	tpy
CO	0.54	0.97
NO_x	2.47	4.50
PM	0.18	0.32
PM_{10}	0.18	0.32
$PM_{2.5}$	0.18	0.32
SO_2	0.17	0.30
VOC	0.20	0.36

[45CSR14, R14-0026, A.31.]

4.1.50. Owners and operators of 2007 model year and later non-emergency stationary compression ignition (CI) internal combustion engine (ICE) with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 C.F.R. §60.4201(a) for their 2007 model year and later stationary CI ICE, as applicable.
[40 C.F.R. §§ 60.4204(b) and 60.4201(a); 45CSR16; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, B.1.] (Rail Transloader Engine and EP37.15)

4.1.51. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 C.F.R. §60.4204(b) (permit condition 4.1.50.) over the entire life of the engine.
[40 C.F.R. § 60.4206; 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, B.1.] (Rail Transloader Engine and EP37.15)

4.1.52. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 C.F.R. 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 C.F.R. §80.510(b) for nonroad diesel fuel, which are:

(1) Sulfur content.

(i) 15 ppm maximum for nonroad (NR) diesel fuel

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

[40 C.F.R. § 60.4207(b); 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, A.7 and B.1.] (Rail Transloader Engine and EP37.15)

4.1.53. If you are an owner or operator and must comply with the emission standards specified in 40 C.F.R. 60 Subpart IIII, you must do all of the following, except as permitted under paragraph (g) of 40 C.F.R. §60.4211 (permit condition 4.1.55.):

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 C.F.R. Part 89 (permit condition 4.1.50.).

[40 C.F.R. §§ 60.4211(a)(1)-(3); 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, A.6 and B.1.] (Rail Transloader Engine and EP37.15)

4.1.54. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 C.F.R. § 60.4204(b) (permit condition 4.1.50.), you must comply by purchasing an engine certified to the emission standards in 40 C.F.R. § 60.4204(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of 40 C.F.R. §60.4211 (condition 4.1.55.).
[40 C.F.R. § 60.4211(c); 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, B.1.] (Rail Transloader Engine and EP37.15)

4.1.55. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[40 C.F.R. §§ 60.4211(g) and 60.4211(g)(1) and (g)(2); 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, B.1.] (Rail Transloader Engine and EP37.15)

Group - 8 Miscellaneous Sources Requirements - - - EU8

4.1.56. Emissions from the Group 8 point sources shall not exceed the following:

CD Identification Number	CD Description	Outlet Loading (gr/dscf)	Existing Or New
CD31.01	Flyash Tank No. 1 D\C	0.01	Modified
CD31.02	Bypass Dust Tank D\C	0.01	Modified
CD31.03	Bypass Dust Loadout D\C	0.01	Modified
CD22.09	Dry Flyash Bin D\C	0.01	New

Emissions from the Group 8 fugitive sources shall not exceed the following:

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP0B.01	Administrative Boiler 1	0.05	0.05
EP0B.02	Administrative Boiler 2	0.05	0.05
EP0G.01	Emergency Generator	0.23	0.19
EP0X.05	Quarry waste pile	0.07	1.04
EP0X.06	New Crusher Feed Pile	1.00	0.50
EP03.01	Storage Bays - 5 Piles	0.35	0.18
EP26.05	Gypsum/synthetic gypsum storage pile (Craneway)	0.05	0.03
EP26.08	Limestone Storage Pile (Craneway)	0.05	0.03
EP15.04.03	Coal storage Pile (Craneway)	0.03	0.01
EP15.04.04	Petcoke Storage Pile (Craneway)	0.03	0.01
EP14.08	Clinker Stockpile (Craneway)	0.02	0.01
EP25.01	Quarry haul roads (New Crusher)	203.90	60.18
EP25.03	Quarry haul roads (waste)	15.10	4.46

Emission Point Identification Number	Emission Point Description	TSP (TPY)	PM_{10} (TPY)
EP25.05.01	Additive trucks (unpaved)	0.00	0.00
EP25.05.02	Additive trucks (paved)	0.42	0.08
EP25.14	Gypsum/Synthetic Gypsum Haul Road (Unpaved)	14.86	4.39
EP25.12	Gypsum/Synthetic Gypsum Haul Road (paved)	0.25	0.05
EP25.15	Alternative Fuel Trucks (paved)	0.16	0.03
EP25.16	Hauling Clinker to Primary Crusher (paved)	0.18	0.04
EP25.17	Hauling Clinker to Primary Crusher (unpaved)	6.17	1.82
EP25.18	Hauling Limestone/clinker from Quarry to Craneway (Unpaved)	12.33	3.64
EP25.19	Hauling Limestone/clinker from Quarry to Craneway (paved)	0.41	0.08
EP25.04.02	Cement Shipments (paved)	7.47	1.46
EP25.06.01	Fuel deliveries (unpaved)	0.00	0.00
EP25.06.02	Fuel deliveries (paved)	0.67	0.13
EP25.09.01	Dry Flyash trucks (for Cement, unpaved)	0.98	0.29
EP25.09.02	Dry Flyash trucks (for Cement, paved)	0.61	0.12
EP25.09.03	Dry Flyash trucks (for Calciner, unpaved)	14.39	4.25
EP25.09.04	Dry Flyash trucks (for Calciner, paved)	0.48	0.09
EP25.10.01	Waste dust customer trucks (unpaved)	3.43	1.01
EP25.10.02	Waste dust customer trucks (paved)	0.21	0.04
EP25.08	Misc. plant vehicles (unpaved)	6.90	2.04
EP25.07	Waste Dust Trucks (unpaved)	30.63	9.04
EP42.06.01	Lime Deliveries (unpaved)	0.00	0.00
EP42.06.02	Lime Deliveries (paved)	0.35	0.07

Additionally, emissions from the combined above sources (both point and fugitive) shall not exceed 324.39 tons per year of TSP nor 98.13 tons per year of PM_{10} based on a 12 month rolling total. Compliance with 45CSR§7-4.1 will be shown by more the stringent requirements of Section 4.1.48.

[45CSR14, R14-0026, A.32.; 45CSR§7-4.1.]

4.1.57. **Compliance Date.** If you have an existing boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016, except as provided in §63.6(i).
[40 C.F.R. §63.7495(b); 45CSR34] (EP0B.01, EP0B.02)

4.1.58. **Initial and Periodic Tune-ups.** If your unit is a new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in the unit designed to burn gas 1 subcategory, you must conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) and (B) of this condition.

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up.

- Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.

- If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 C.F.R. §§ 63.7500(a), Table 3 – Work Practice Standards, Item #1; 40 C.F.R. §63.7500(e); 40 C.F.R. §§ 63.7540(a)(12), 63.7540(a)(10)(i) through (vi), 63.7515(d), 63.7540(a)(13), 63.7515(g), 63.7505(a); 45CSR34] (EP0B.01, EP0B.02)

4.1.59. **One-time Energy Assessment**. If your unit is an existing boiler or process heater located at a major source facility, you must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575:

a. A visual inspection of the boiler or process heater system.

b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.

c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.

e. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.

f. A list of cost-effective energy conservation measures that are within the facility's control.

g. A list of the energy savings potential of the energy conservation measures identified.

h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[40 C.F.R. §63.7500(a)(1), Table 3, Item 4; 40 C.F.R. §63.7505(a); 45CSR34] (EP0B.01, EP0B.02)

4.1.60. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. §63.7500(a)(3); 45CSR34] (EP0B.01, EP0B.02)

4.1.61. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.] (EP0B.01, EP0B.02)

4.1.62. Compliance with the visible emission requirements of 45CSR§2-3.1 (condition 4.1.61.) shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.] (EP0B.01, EP0B.02)

4.1.63. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (3) of §63.6640. In order for the engine to be considered an emergency stationary RICE under 40 C.F.R. 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of §63.6640, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of §63.6640, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
[40 C.F.R. §§ 63.6640(f), (f)(1), (f)(2), and (f)(3); 45CSR34] (EP0G.01)

4.1.64. Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(2) of §60.4202. For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
[40 C.F.R. §§ 60.4200(a)(2)(i), 60.4205(b), 60.4202(a)(2); 45CSR34] (EP0G.01)

4.2. Monitoring Requirements

Facility Wide Requirements

4.2.1. See Section 3.2.

4.2.2. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR§10-8.2.a. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a., EP42.04]

Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2

4.2.3. No additional requirements.

Pyroprocessing - - - EU3

4.2.4. A continuous emission monitoring system (CEMS) shall be installed, operated, and maintained to measure the emissions of SO_2, NO_x, THC and CO from the preheater-precalciner kiln system exhaust stack. The CEMS shall be installed within 180 days of startup of the pyroprocessing line, and operated in compliance with the USEPA Part 60, Appendix B, Performance Specification 2 (NO_x and SO_2) and Performance Specification 4, 4a or 4b (CO) as appropriate.
[45CSR14, R14-0026, B.11.]

4.2.5. The permittee shall maintain daily and monthly records of the amount of clinker transferred to the outdoor clinker storage piles. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.
[45CSR14, R14-0026, B.12.]

4.2.6. Monitoring requirements.

a. Any owner or operator of an kiln subject to 45CSR§40-10 must complete an initial performance test and subsequent annual testing consistent with the requirements of 40 CFR Part 60, appendix A, method 7, 7A, 7C, 7D or 7E;

[45CSR§40-10.4.a., Preheater-Precalciner Kiln, (EP42.04)]

4.2.7. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3, 4 and 5 (Sections 4.1.34. and 4.1.35.) by testing and /or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.
[45CSR§10-8.2.c, 45CSR14, R14-0026, B.5., Preheater-Precalciner Kiln, (EP42.04), Finish Mills (EP44.09, EP44.12, and EP19.02)]

Clinker Handling and Storage - - - EU4

4.2.8. Weekly USEPA Method 22 Visible Emissions observations shall be conducted on each emission point listed in Section 4.1.39, during periods when the equipment is operating and processing clinker. The Method 22 opacity observations shall be conducted each week, at a frequency not to exceed ten (10) days between consecutive observations, using a certified reader. If a positive emission is observed during the weekly USEPA Method 22 observations, a corrective action as listed in the facility's Operating and Maintenance Plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 opacity measurement (6-minutes) on the affected source. Records of the Method 22 observations and any necessary Method 9 observation shall be retained on-site for at least five (5) years. Upon request, the records shall be certified and made available to the Directory or his/her duly authorized representative.
[Consent Order No. CO-R7-E-2016-6, Order for Compliance, Item 4]

Fuel Handling - - - EU5

4.2.9. See Section 3.2.

4.2.10. Compliance with opacity standards shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 C.F.R. 60. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
[45CSR16, 40 C.F.R. § 60.11(b), 45CSR14, R14-0026, B.8.]

Cement Production - - - EU6

4.2.11. See Section 3.2.

4.2.12. The requirements under Section 3.2.4 [40 C.F.R. § 63.1350(f)(2)(i) through (iii)] to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS). If the owner or operator chooses to install a (COMS) in lieu of conducting the daily visual emissions testing required under Section 3.2.4 [40 C.F.R. §63.1350(f)(2)(i) through (iii)], then the (COMS) must be installed at the outlet of the PM control device of the raw mill or finish mill, and the (COMS) must be installed, maintained, calibrated, and operated as required by the general provisions in 40 C.F.R. Part 63 Subpart A and according to PS–1 of appendix B to 40 C.F.R. Part 60. If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under Section 3.2.4 [40 C.F.R. § 63.1350(f)(2)(i) through (iii)], the requirements in 40 C.F.R. § 63.1350 (m)(1) through (4), (m)(10) and (m)(11) apply.
[45CSR34, 40 C.F.R. §§ 63.1350(f)(4)(i) and (ii), 40 C.F.R. §60.64(b)(4); 45CSR16, 45CSR14, R14-0026, B.10.]

Shipping - - - EU7

4.2.13. See Section 3.2.

4.2.14. In order to determine compliance with conditions 4.1.48. and 4.1.49. of this permit, the permittee shall maintain monthly records of the amount of fuel used by the rail transloader engine.

Compliance with the fuel usage limitation in 4.1.48., and the annual emission limits in 4.1.49., shall be demonstrated on a 12-month rolling total.

[45CSR14, R14-0026, B.18.; 45CSR§30-5.1.c.]

Other Miscellaneous Sources - - - EU8

4.2.15. See Section 3.2.

4.3. Testing Requirements

Facility Wide Requirements

4.3.1. See Section 3.3.

Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2

4.3.2. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Sections 4.1.9. and 4.1.13. If any emissions are observed in accordance with the Method 22 testing the permittee shall, within 24 hours, perform a Method 9 test in accordance with 40 CFR Part 60, Appendix A. If six (6) consecutive monthly inspections reveal no visible emissions, then the observer shall take the readings semi-annually. If there are no emissions observed in the semi-annual inspection, then the readings shall be annual. If, at any time a visible emission is observed, the inspections shall revert back to monthly, until (6) consecutive monthly readings have no visible emissions observed. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.8.]

4.3.3. (1) In determining compliance with the particulate matter standards in Sections 4.1.11. and 4.1.12. [40 C.F.R. § 60.672 (b)], the owner or operator shall use Method 9 and the procedures in 40 C.F.R. §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) [Sections 4.1.11. and 4.1.12.] or §60.672(e)(1) of 40 C.F.R. 60 Subpart OOO, the duration of the Method 9 (40 CFR part 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of 40 C.F.R. 60 Subpart OOO must be based on the average of the five 6-minute averages.

The permittee must demonstrate compliance with sections 4.1.11 and 4.1.12 by conducting an initial performance test. A repeat performance test within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays is required for affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008.

[45CSR16, 40 C.F.R. §§ 60.675 (c) (1), and (3) and Table 3 of 40 C.F.R. 60, Subpart OOO, 45CSR14, R14-0026, B.8. (EU1, EU2, EU8, EP37.15)]

4.3.4. The owner or operator shall determine compliance with the particulate matter standards in Section 4.1.10. [40 C.F.R. § 60.672 (a)] as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 and the procedures in 40 C.F.R. § 60.11 shall be used to determine opacity.

[45CSR16, 40 C.F.R. §60.675 (b); 45CSR14, R14-0026, B.1. (EU1, EU2, EU8)]

4.3.5. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this condition.

a. The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

b. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

c. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE Requirement for Each Pollutant = (1.25) x (STD)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

d. Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

e. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c)

[40 C.F.R. § 60.4212; 45CSR16; 45CSR34; 40 C.F.R. §63.6590(c)(7); 45CSR14, R14-0026, B.1] (EP37.15)

Pyroprocessing - - - EU3

4.3.6. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
[45CSR§10-8.2.b., Preheater-Precalciner Kiln, (EP42.04)]

4.3.7. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of 45CSR§§10-3, 4 or 5 (Sections 4.1.34. and 4.1.35.). Such tests shall be conducted in accordance with the appropriate test method set forth in 40 C.F.R. Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR§10-8.1.a., 45CSR14, R14-0026, B.5., Preheater-Precalciner Kiln (EP42.04), Finish Mills (EP44.09, EP44.12 and EP19.02)]

4.3.8. Reserved.

4.3.9. In order to determine compliance with the hourly VOC, TSP, and PM_{10} emissions limits set forth in Section 4.1.22. and the particulate loading limit set forth in Section 4.1.24., the permittee shall perform EPA approved stack tests on the preheater-precalciner kiln system exhaust stack as outlined in the following table. The initial compliance test must be performed within 180 days of startup of the pyroprocessing system. Said stack tests shall be used to determine a "LB of pollutant per ton of clinker produced" emission factor. This emission factor along with clinker production records shall be used to determine compliance with the annual VOC and PM emission limits set forth in Section 4.1.22.

Test	Test Results	Testing Frequency
Initial	≤50% of VOC, TSP, PM_{10} limits	Once/5 years
Initial	Between 50% and 90% of VOC, TSP, PM_{10} limits	Once/3 years
Initial	≥90% of VOC, TSP, PM_{10} limits	Annual
Annual	After two successive tests indicate emission rates ≤50% of VOC, TSP, PM_{10} limits	Once/5 years
Annual	After two successive tests indicate emission rates <90% of VOC, TSP, PM_{10} limits	Once/3 years
Annual	≥90% of VOC, TSP, PM_{10} limits	Annual
Once/3 years	After two successive tests indicate emission rates ≤50% of VOC, TSP, PM_{10} limits	Once/5 years
Once/3 years	< 90% of VOC, TSP, PM_{10} limits	Once/3 years
Once/3 years	≥90% of VOC, TSP, PM_{10} limits	Annual
Once/5 years	≤50% of VOC, TSP, PM_{10} limits	Once/5 years
Once/5 years	< 90% of VOC, TSP, PM_{10} limits	Once/3 years
Once/5 years	≥90% of VOC, TSP, PM_{10} limits	Annual

[45CSR14, R14-0026, B.13., Preheater-Precalciner (EP42.04)]

4.3.10. Reserved.

4.3.11. Within 180 days of startup of the new PH/PC kiln the permittee will perform tests using EPA Method 202 or an alternative test method approved by the Director to determine the emission rate of Condensable Particulate Matter (CPM) emitted by the new PH/PC kiln.
[45CSR14, R14-0026, B.17., Preheater-Precalciner Kiln, (EP42.04)]

Clinker Handling and Storage - - - EU4

4.3.12. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 4.1.39. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.21.]

Fuel Handling - - - EU5

4.3.13. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 4.1.40. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.23.]

4.3.14. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, the owner or operator of such facility shall conduct performance test(s) to determine compliance with emission limitations set forth in §60.254(a) and furnish a written report of the results of such performance test(s).
[45CSR16, 40 C.F.R. §60.8 (a), 40 C.F.R. §60.255(a), 45CSR14, R14-0026, B.8.]

4.3.15. The owner or operator must determine compliance with the applicable opacity standards in Section 4.1.42. [40 C.F.R. §60.254(a)] as follows: as specified in paragraphs (1) through (3) of this permit condition.

(1) Method 9 of appendix A–4 of 40 C.F.R. part 60 and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (1)(i) and (ii) of this permit condition.
   (i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).
   (ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of 40 C.F.R. part 60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (2)(i) through (iii) of this permit condition must be used.
   (i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
   (ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
   (iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (3)(i) through (iii) of this permit condition are met.
   (i) No more than three emissions points may be read concurrently.
   (ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
   (iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[45CSR16, 40 C.F.R. §§60.257(a)(1) through (3), 45CSR14, R14-0026, B.8. Fuel Handling System EU5 (except EP41.02.04, EP15.04.03, and EP15.04.04)]

Cement Production - - - EU6

4.3.16. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 4.1.43. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.25.]

Shipping - - - EU7

4.3.17. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 4.1.47. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.29.]

Other Miscellaneous Sources - - - EU8

4.3.18. The permittee shall perform monthly USEPA Method 22 Visible Emissions tests on each emission point listed in Section 4.1.56. If a positive emission is observed during the monthly USEPA Method 22 inspections, a corrective action as listed in the site-specific Startup, Shutdown, and Malfunction plan must be initiated within one hour. Additionally, within one hour a certified USEPA Method 9 observer must conduct a USEPA Method 9 "Opacity Measurement" (6-minutes) on the affected source. Records of the Method 22 testing and any necessary Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.
[45CSR14, R14-0026, A.33.]

4.4. Recordkeeping Requirements

Facility Wide Requirements

4.4.1. See Section 3.4.

4.4.2. For the purpose of determining compliance with production limits set forth in Sections 4.1.1., and 4.1.19., the permittee shall maintain daily and monthly records of the amount of clinker produced in the new preheater-precalciner kiln. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.
[45CSR14, R14-0026, B.15.]

4.4.3. The permittee shall maintain monthly hours of operation for the major processing operations at the facility. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.
[45CSR14, R14-0026, B.16.]

Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2

4.4.4. See Section 3.4.

4.4.5. Any owner or operator subject to the provisions of 40 C.F.R. Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 C.F.R. § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date.

(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days not less than 30 days prior to such date.

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[45CSR16, 40 C.F.R. § 60.7 (a) (1), (2), (3), 45CSR14, R14-0026, B.8.]

Pyroprocessing - - - EU3

4.4.6. See Section 3.4.

4.4.7. Recordkeeping requirements. -- Any owner or operator of a kiln subject to 45CSR§40-10 must produce and maintain records, which include, but are not limited to:

a. The emissions, in pounds of NO_X per ton of clinker produced from each affected Portland cement kiln;

b. The type of control used for each affected Portland cement kiln;

c. The date, time and duration of any startup, shutdown or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment;

d. The results of any performance testing;

e. Daily cement kiln production records; and

f. All records required to be produced or maintained will be retained on site for a minimum of 5 years and be made available to the Secretary or Administrator upon request.

[45CSR§40-10.5., Preheater-Precalciner Kiln, (EP42.04)]

4.4.8. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 or 5 (Sections 4.1.34. and 4.1.35.) shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.
[45CSR§10-8.3.a, 45CSR14, R14-0026, B.5., Preheater-Precalciner Kiln EP42.04, EP44.09, EP44.12, EP19.02]

4.4.9. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§10-8.3.c, 45CSR14, R14-0026, B.5., Preheater-Precalciner Kiln, (EP42.04)]

Clinker Handling and Storage - - - EU4

4.4.10. See Section 3.4.

Fuel Handling - - - EU5

4.4.11. See Section 3.4.

Cement Production - - - EU6

4.4.12. See Section 3.4.

Shipping - - - EU7

4.4.13. See Section 3.4.

Other Miscellaneous Sources - - - EU8

4.4.14. See Section 3.4.

4.4.15. You must keep records according to paragraphs (1) and (2) of this condition.

(1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).
** Note – Compliance reports are required once every 5 years for the Administrative Boilers EP0B.01 and EP0B.02 pursuant to 40 C.F.R. §63.7550(b) in permit condition 4.5.15.*

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §63.7555(a); 45CSR34] (EP0B.01, EP0B.02)

4.4.16. Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD.

(a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.§(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34] (EP0B.01, EP0B.02)

4.5. Reporting Requirements

Facility Wide Requirements

4.5.1. See Section 3.5.

Quarry and Crushing and Raw Material Preparation - - - EU1 and EU2

4.5.2. See Section 3.5.

4.5.3. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Sections 4.1.10. and 4.1.12. [40 C.F.R. §60.672], including reports of opacity observations made using Method 9 to demonstrate compliance with Sections 4.1.11. and 4.1.12. [40 C.F.R. §60.672 (b)], and 40 C.F.R. §60.672 (f).
[45CSR16, 40 C.F.R. §60.676 (f), 45CSR14, R14-0026, B.8. (EU1, EU2, EU8, EP37.15)]

Pyroprocessing - - - EU3

4.5.4. See Section 3.5.

4.5.5. Reporting requirements. -- Any owner or operator subject to the requirements of 45CSR§40-10.1. (condition 4.1.32.) must comply with the following reporting requirements:

Submit a report documenting for that kiln the total NO_X emissions from May 1 through September 30 of each year to the Secretary and Administrator by October 31 of each year, beginning in 2009.

[45CSR§40-10.3.b., Preheater-Precalciner Kiln, (EP42.04)]

4.5.6. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§10-8.3.b, Preheater-Precalciner Kiln, (EP42.04)]

Clinker Handling and Storage - - - EU4

4.5.7. See Section 3.5.

Fuel Handling - - - EU5

4.5.8. See Section 3.5.

4.5.9. The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section §60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections §§60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section §60.255(d) shall also include information which demonstrates that the control devices are identical.
[40 C.F.R. §60.258(c); 45CSR16]

Cement Production - - - EU6

4.5.10. See Section 3.5.

Shipping - - - EU7

4.5.11. See Section 3.5.

Other Miscellaneous Sources - - - EU8

4.5.12. See Section 3.5.

4.5.13. You must report each instance in which you did not meet the work practice standard in Table 3 to Subpart DDDDD (permit condition 4.1.58.). These instances are deviations from the work practice standards, in this subpart. These deviations must be reported according to the requirements in §63.7550 (permit condition 4.5.14.).
[40 C.F.R. §63.7540(b); 45CSR34] (EP0B.01, EP0B.02)

4.5.14. **Compliance Report**. You must submit a Compliance report for 40 C.F.R. 63 Subpart DDDDD containing:

a. The information in §63.7550(c)(5)(i) through (iii), (xiv), and (xvii) which is:

(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 C.F.R. §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart DDDDD that apply to you (condition 4.1.58.), a statement that there were no deviations from the work practice standards during the reporting period.

You must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 and ending on December 31 within 5 years after the compliance date that is specified for your source in 40 C.F.R. §63.7495.

(2) The first 5-year compliance report must be postmarked or submitted no later than January 31.

(3) Each subsequent 5-year compliance report must cover the 5-year periods from January 1 to December 31.

(4) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31.

(5) You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

You must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[40 C.F.R. §63.7550(a), Table 9, Items # 1.a. and # 1.b.; 40 C.F.R. §§63.7550(b), (c)(1), and (c)(5)(i) through (iii), (xiv), and (xvii); 40 C.F.R. §63.7550(h)(3); 45CSR34] (EP0B.01, EP0B.02)

4.5.15. **Initial Notification**. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of 40 C.F.R. 63 Subpart ZZZZ, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
[40 C.F.R. §63.6645(f); 45CSR34] (EP0G.01)

Quarry and Crushing - - - EU1

4.5.16. The permittee shall maintain daily and monthly records of the amount of limestone delivered to pile EP37.06. Such records shall be retained on-site by the permittee for at least five (5) years and shall be certified and made available to the Director or his duly authorized representative upon request.
[45CSR14, R14-0026, B.19.]

4.5.17. Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a) and (b) of this condition.

a. Submit an initial notification as required in §60.7(a)(1). The notification must include the following information:

1. Name and address of the owner or operator;

2. The address of the affected source;

3. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

4. Emission control equipment; and

5. Fuel used.

b. Keep records of the following information:

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.

2. Maintenance conducted on the engine.

3. If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

4. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 C.F.R. § 60.4214(a); 45CSR16; 40 C.F.R. §63.6590(c)(7); 45CSR34] (EP37.15)

4.6. Compliance Plan

4.6.1. No compliance plan is required since all sources listed in the renewal application Attachments F have passed their respective performance testing requirements.

APPENDIX A

40 C.F.R. 63 Subpart LLL
Portland Cement Manufacturing MACT
Site Specific Monitoring Plan

Prepared for:

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Table of Contents

1.0 OVERVIEW 1
1.1 INTRODUCTION 1
1.2 DEFINITION OF A CONTINUOUS MONITORING SYSTEM 1
1.3 REGULATORY REQUIREMENTS FOR A PC MACT SITE SPECIFIC MONITORING PLAN 1
1.4 PC MACT REQUIRED CMS'S BEING OPERATED AT THE PLANT 2
2.0 CMS INSTALLATION, PERFORMANCE AND EQUIPMENT SPECIFICATIONS, AND DATA COLLECTION AND REDUCTION (40 CFR 1350(P)(1)(I) AND (II) AND (P)(2)(II)) 4
2.1 CMS INSTALLATION (40 CFR 1350(P)(1)(I)) 4
2.2 CMS PERFORMANCE AND EQUIPMENT SPECIFICATIONS (40 CFR 1350(P)(1)(II)) 5
2.3 CMS DATA COLLECTION AND REDUCTION (40 CFR 1350(P)(2)(II)) 5
2.3.1 Programmable Logic Controller (PLC) and Data Acquisition and Handling System (DAHS) 5
2.3.2 VIM Technologies, Inc. CEMLink 6 5
2.3.3 Manual Opacity Monitoring 7
3.0 ONGOING OPERATION AND MAINTENANCE PLANS AND PROCEDURES (40 CFR 63.1350(P)(2)(I)) 8
3.1 GENERAL 8
3.2 CEMS QA/QC PLANS 8
3.3 MONITORING PROCEDURES 10
4.0 QUALITY CONTROL (QC) ACTIVITIES (40 CFR 1350(P)(1)(III) AND(P)(4)) 13
4.1 GENERAL 13
4.2 ROUTINE PERFORMANCE EVALUATIONS ((40 CFR 1350(P)(1)(III)) 13
4.2.1 Daily Calibration Checks 13
4.2.2 Systems Checks 14
4.2.3 Routine Preventative Maintenance 14
5.0 QUALITY ASSURANCE ACTIVITIES (40 CFR 63.1350(P)(2)(II)) 15
5.1 ONGOING QA ACTIVITIES 15
5.2 QUALITY ASSURANCE PROCEDURES 15
5.3 RELATIVE ACCURACY TEST AUDIT (RATA) 15
5.3.1 RATA Testing Prerequisites 16
5.3.2 RATA Testing Procedures 16
5.3.3 RATA Data Reduction and Analysis 16
5.4 RELATIVE ACCURACY CALCULATIONS 16
5.5 CALIBRATION GAS AUDIT 17
6.0 PERFORMANCE EVALUATIONS (40 CFR 63.1350(P)(3)) 18
6.1 GENERAL 18
6.2 REPORT EMISSION TEST REQUIREMENTS 18
6.3 PERFORMANCE TEST NOTIFICATION AND REPORTING 18
6.4 PERFORMANCE TEST FREQUENCY 18
6.5 CONDITIONS OF PERFORMANCE TESTS 19
7.0 RECORDKEEPING AND REPORTING (40 CFR 63.1350(P)(2)(III)) 20
7.1 GENERAL 20
7.2 PERFORMANCE TEST REPORT OUTLINE 20
7.3 PERFORMANCE TEST REPORTING REQUIREMENTS 21

8.0 OPERATION AND MAINTENANCE OF THE CMS'S (40 CFR 1350(P)(4)) 22
ATTACHMENT A: OPACITY MONITORING PLAN 23

1.0 Overview

1.1 Introduction

The United States Environmental Protection Agency (U.S. EPA) on February 12, 2013 promulgated revised Maximum Available Control Technology (MACT) National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Portland Cement Manufacturing Industry (i.e., the PC MACT Rule). This regulation is found in 40 CFR 63 Subpart LLL. The Martinsburg Plant (Plant) is a Portland cement plant as defined in 40 CFR 63.1341, and is therefore subject to the PC MACT Rule. 40 CFR 63.1350(p) requires the development of a PC MACT Site Specific Monitoring Plan (Plan) if a Portland cement plant demonstrates compliance with any PC MACT emission limits through performance evaluations (i.e., testing) or emissions monitoring. This Plan also includes the Plant Opacity Monitoring Plan which is presented in Attachment A.

1.2 Definition of a Continuous Monitoring System

40 CFR 63.1350(p)(1) through (4) references a Continuous Monitoring System (CMS). As defined by 40 CFR 63.2, a CMS is "*a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.*"

1.3 Regulatory Requirements for a PC MACT Site Specific Monitoring Plan

A summary of the regulatory requirements specified in 40 CFR 63.1350(p)(1) through (4) are as follows.

(p) Develop and submit, upon request, monitoring plans.

If the Plant demonstrates compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the Plant needs to develop a site-specific monitoring plan according to the requirements specified in 40 CFR 63.1350 (p)(1) through 40 CFR 63.1350 (p)(4). This requirement would also apply if the Plant petitions the EPA for allowing use of alternative monitoring parameters provided in 40 CFR 63.1350(o) and 40 CFR 63.8(f). Also, if the Plant uses or plans to use a Bag Leak Detection System (BLDS), the Plant needs to meet the requirements specified in 40 CFR 63 1350(p)(5).

(1) For each CMS required, the Plant needs to develop, and submit to the West Virginia Department of Environmental Protection (WV DEP) for approval if requested by WV DEP, a Plan that addresses paragraphs 40 CFR 63.1350(p)(1)(i) through 40 CFR 63.1350(p)(1)(iii). The Plant needs to submit the Plan, if requested by WV DEP, at least 30 days before the conduct of the initial performance evaluation of each Plant CMS.

(i) Install each CMS sampling probe or other interface at a measurement location relative to each affected process unit so that that the measurement is representative of the control of the exhaust emissions (e.g., on or downstream of the last control device),

(ii) Develop and maintain performance and equipment specifications for all sample interfaces, the pollutant concentrations or parametric signal analyzers, and the data collection and reduction systems, and

(iii) Perform evaluation procedures and acceptance criteria (e.g., RATA's, calibrations, etc).

(2) In the Plan, the Plant needs to also address 40 CFR 63.1350 (p)(2)(i) through 40 CFR 63.1350 (p)(2)(iii) and provide the following:

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and 40 CFR 68(c)(4)(ii),

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d), and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and 40 CFR 63(e)(2)(i).

(3) The Plant needs to conduct a performance evaluation of each CMS in accordance with the Plan.

(4) The Plant needs to operate and maintain the CMS in continuous operation according to the Plan.

1.4 PC MACT Required CMS's Being Operated at the Plant

The Plant operates the following PC MACT required CMS's as provided below. Also included are the PC MACT regulatory monitoring requirements as noted in the parenthesis.

- Total Hydrocarbon (THC) Continuous Emissions Monitoring System (CEMS) located on the Main Stack *(40 CFR 63.1350(i))*,
- Mercury (Hg) CEMS located on the Main Stack *(40 CFR 63.1350(k))*,
- Hydrogen Chloride (HCl) CEMS located on the Main Stack *(40 CFR 63.1350(l))*,
- Particulate Matter (PM) Continuous Parametric Monitoring System (CPMS) located on the Main Stack *(40 CFR 63.1350(b))*,

- Dioxin/Furan (D/F) CPMS (i.e., inlet baghouse temperature) located at the inlet to the Kiln and Alkali Removal System (ARS) Baghouses *(40 CFR 63.1350(g))*,
- Hourly clinker production monitoring for the PH/PC Kiln System *(40 CFR 63.1350(d))*,
- Opacity monitoring using Method 22/Method 9 at all applicable PC MACT affected sources except for Finish Mill #1 and Finish Mill #2 which use a Continuous Opacity Monitoring System (COMS) to measure opacity *(40 CFR 63.1350(f))*,
- Continuous flowrate monitor located on the Main Stack *(40 CFR 63.1350(n))*,
- O_2 monitor located on the Main Stack *(40 CFR 63.1343)*, and
- Site-specific moisture monitoring per EPA Test Method 4 or moisture monitor located on the Main Stack *(40 CFR 63.1343)*.

2.0 CMS Installation, Performance and Equipment Specifications, and Data Collection and Reduction (40 CFR 1350(p)(1)(i) and (ii) and (p)(2)(ii))

2.1 CMS Installation (40 CFR 1350(p)(1)(i))

Continuous monitoring using the CMS sampling probes is performed by the Plant at locations which are representative of the control of the exhaust emissions for those air pollutants regulated by PC MACT. Specifically, this continuous monitoring includes installation and operation at the Plant of HCl, THC, and Hg CEMS (i.e., CMS sampling probes), which are located on the Plant's Main Stack. The continuous monitoring data from the HCl and Hg CEMS is used for demonstrating compliance with the PC MACT HCl and Hg kiln emission limits. The continuous monitoring data from the THC CEMS is used parametrically for demonstrating compliance with the PC MACT Organic HAP (O-HAP) kiln emission limit.

In addition, particulate matter (PM) and dioxin furan (D/F) CPMS are operated by the Plant to demonstrate compliance parametrically with the applicable PC MACT PM and D/F existing kiln emission limits. For the PM CPMS, filterable PM is parametrically monitored by a PM CPMS located on the Main Stack. The analog or digital output signal from the PM CPMS is correlated annually to corresponding Method 5 filterable PM stack test data to establish a parametric PM emission limit for the PH/PC Kiln system. For the D/F CPMS, a temperature probe is installed and operated at the inlet to the Kiln and ARS Baghouses to parametrically monitor the baghouse inlet temperatures. The Kiln and ARS Baghouse inlet temperatures are correlated to corresponding D/F stack test data to parametrically represent D/F emissions for demonstrating compliance with the PC MACT D/F kiln emission limit. The Main Stack volumetric stack flowrate is continuously monitored and the volumetric stack flowrate data is used in conjunction with the Hg CEMS concentration data and the measured hourly Plant clinker production data from the PH/PC Kiln system to determine the PH/PC Kiln system Hg emission rate which is expressed as pounds/million (MM) tons clinker.

Manual monitoring (i.e., Method 22 and Method 9) is used to demonstrate compliance with the opacity limit for all applicable PC MACT affected sources, except for Finish Mill #1 and Finish Mill #2, so no installation is required. For Finish Mill #1 and Finish Mill #2, COMS are installed on each finish mill stack to measure opacity.

For determining hourly clinker production from the PH/PC Kiln system, the Plant has installed, calibrated, maintains, and operates a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of kiln feed provided to the PH/PC Kiln system. The system of measuring kiln feed to the PH/PC Kiln system is maintained within ± 5 percent accuracy and is checked quarterly. To implement this clinker production monitoring, the Plant has developed a procedure which specifies how the hourly clinker production rate from the PH/PC Kiln system is calculated.

Percent Oxygen (O_2) is continuously monitored from an O_2 sensor located on the Main Stack. The percent O_2 data is used in determining the THC and HCl emission rates since these emission

rates need to be corrected to 7 percent oxygen per the requirements specified in 40 CFR 63.1343(a). D/F emissions testing is conducted periodically per 40 CFR 63.1349(c) and the results are also corrected for 7% O_2.

The moisture content contained in the Main Stack is determined by measuring moisture using a ABB ACT-NT rack mounted FTIR analyzer located on the Main Stack, or alternatively, by using site specific stack moisture content data taken from past Plant stack tests which utilized U. S. EPA Test Method 4, "Determination of Moisture Content in Stack Gases" (40 CFR 60 Appendix A-3) per the requirements specified in 40 CFR 63.1343(a).

2.2 CMS Performance and Equipment Specifications (40 CFR 1350(p)(1)(ii))

The Plant utilizes the CMS's described in Section 2.1 to meet PC MACT continuous monitoring requirements. Specific information regarding the THC, Hg, HCl, PM, D/F, O_2, Moisture, Opacity (COMS), and flowrate CMS's associated with each CMS performance and equipment specification is provided in the THC, Hg, and HCl CEMS PC MACT QA/QC Plans, PC MACT PM CPMS QA/QC Plan, COMS QA/QC Plan, and in vendor supplied equipment information for the other cited PC MACT regulated pollutants and parameters. Manual monitoring (i.e., Method 22 and Method 9) is used to demonstrate compliance with the opacity limit for all applicable PC MACT affected sources, except for Finish Mill #1 and Finish Mill #2 which use COMS to monitor opacity; performance and equipment specifications are not applicable for manual monitoring.

2.3 CMS Data Collection and Reduction (40 CFR 1350(p)(2)(ii))

2.3.1 Programmable Logic Controller (PLC) and Data Acquisition and Handling System (DAHS)

The Plant utilizes a state-of-the-art Programmable Logic Controller (PLC). The PLC is an industrial computer control system that continuously monitors the state of input devices and makes decisions based upon a custom program to control the state of output devices. The PLC serves as the gateway for communications between the CEMS, CPMS, COMS, other analyzers (O_2 and flowrate), and the Data Acquisition and Handling System (DAHS) and is located on a Plant dedicated personal computer (PC). Specifically, the PLC provides control and monitoring of digital and analog input and output signals to and from the CEMS, CPMS, and COMS systems.

For calculating hourly clinker production, the PLC receives electrical signals (e.g., milliamps) from the kiln feed weigh scale system. The PLC is programmed to only utilize an electrical signal which corresponds to a kiln feed rate which is greater than or equal to 10 tons/hour. This prevents the PLC from using an electrical signal representing "electronic noise" as a valid data during those times when there is no kiln feed going across the weigh scale.

2.3.2 VIM Technologies, Inc. CEMLink 6

The DAHS software used at the Plant is the VIM Technologies, Inc. CEMLink 6. This software provides the following functions:

- **CEMS System Control:**
  - Calibrations auto/manual/corrections
  - Probe purging/back flush
  - Determine/establish alarm limits
  - Initiate maintenance operations

- **DCS and Process Critical Data:**
  - Gateway between DAHS PC and Plant Information
  - Logs data during DAHS PC downtimes
  - Computes values based on plant inputs and outputs them as required

- **Data Availability:**
  - Processes 1-minute analyzer data
  - Up to 7-days of raw data storage
  - Automatic upload of stored data following periods of DAHS PC non-availability
  - Computes emission rates based on CEMS input/output (I/O)

- **Operator Interfaces/Touch Screen Panels:**
  - Monitor real time values
  - Acknowledge alarms
  - Initiate calibrations
  - Initiate calibration gas audit (CGA) and analyzer maintenance modes

The CEMLink 6 Data Supervisor is a database program that organizes reports and stores the CEMS, CPMS, and COMS data. All system information including analyzer readings, corrected averages, limited parameters, monitoring codes, process codes, calibration data, regulatory data, alarms and events are logged in the Data Supervisor. Reports can be viewed on the screen, sent to any network or dedicated printer, exported to another application for customization or rolled up into a PDF format. Available reports include:

- Monthly Hourly Averages
- Monthly 24-Hour Averages
- Monthly Calibration Logs
- 40 CFR 60.7 Summary Reports
- 12-Month Rolling Report
- CEMS Downtime Report
- Excess Emissions Report
- Process Status Report (monthly, quarterly, or bi-annually)
- 40 CFR 60 Edit Log (monthly, quarterly, or bi-annually)

For compliance reporting calculations, CEMLink 6 processes 1-minute average emission data as measured by the CEMS into 1-hour average emission data. The 1-hour average emission data are then used to calculate a 30-day rolling average emission rate. For Hg, CEMLink 6 will also use hourly clinker production data to calculate the 30-day Hg emission rates in the units of Lbs Hg/MM tons clinker.

2.3.3 Manual Opacity Monitoring

Results of manual opacity monitoring will be recorded on paper forms or will be recorded using electronic devices and stored on electronic media. Records will be maintained in the Plant Environmental Manager's office.

3.0 Ongoing Operation and Maintenance Plans and Procedures (40 CFR 63.1350(p)(2)(i))

3.1 General

The Plant has developed and maintains a number of specific operation and maintenance plans and procedures related to site-specific monitoring that is being conducted in order to meet the applicable PC MACT requirements. These operation and maintenance plans and procedures are referenced throughout this Plan. Provided below is a listing and overview of each operation and maintenance plan and procedure. Additional details can be found in each specific operation and maintenance plan and procedure which is maintained by the Plant.

3.2 CEMS QA/QC Plans

- **Hg CEMS QA/QC Plan**

The Plant uses a Tekran Hg CEMS, consisting of a 2537A Hg Mercury Analyzer, 3310 Hg Calibrator, 3315 Hg Ionic Calibrator, 3320 Sample Conditioner, 3340 Dilution Probe Controller, 3342 Non-Inertial Probe, and a 3305 CEMS controller located on the Main Stack. The Tekran Hg CEMS is an extractive sampling unit that measures Hg by cold vapor atomic fluorescence detection. The Tekran Hg CEMS also utilizes a pure gold cartridge which is immune to memory effects and will not degrade over time. The Tekran Hg CEMS in compliance with 40 CFR 63.1350(k) requirements and the Hg CEMS data is used to demonstrate compliance with the PC MACT Hg emission limit of 55 pounds/MM tons clinker (40 CFR 63.1343(b), Table 1).

The PC MACT Hg CEMS QA/QC Plan describes in detail the Tekran Hg CEMS which serves as the basis for assessing and maintaining the quality of continuous Hg emission monitoring data. The objective of the PC MACT Hg CEMS QA/QC Plan is to provide documentation for the collection of Hg emission data of known and acceptable quality, and in sufficient quantity, in order to demonstrate compliance with the PC MACT monitoring requirements applicable to the Plant.

The PC MACT Hg CEMS QA/QC Plan also address other necessary support services and activities, such as manual methods source testing, data reduction, spare parts inventory control, and report preparation and submittal; all of which are required in order to maintain data quality.

- **HCl CEMS QA/QC Plan**

The Plant uses an ABB ACF5000 multi-component Fourier Transfer Infrared (FTIR) analyzer located on the Main Stack for the measurement of HCl. The ABB ACF5000 multi-component FTIR is based on the principle of using FTIR spectroscopy which absorbs HCl in the infrared region to determine HCl emissions. The ABB ACF5000 multi-component FTIR HCl CEMS is in compliance with 40 CFR 63.1350(l) requirements and the HCl CEMS data is used to

demonstrate compliance with the PC MACT HCl emission limit of 3.0 ppmvd (40 CFR 63.1343(b), Table 1).

The PC MACT HCl CEMS QA/QC Plan describes in detail the ABB ACF5000 multi-component FTIR which serves as the basis for assessing and maintaining the quality of continuous HCl emission monitoring data. The objective of the PC MACT HCl CEMS QA/QC Plan is to provide documentation for the collection of HCl emission data of known and acceptable quality and in sufficient quantity in order to demonstrate compliance with the air pollution emission and air monitoring regulations applicable to the Plant.

The PC MACT HCl CEMS QA/QC Plan also address other necessary support services and activities, such as manual methods source testing, data reduction, spare parts inventory control, and report preparation and submittal; all of which are required in order to maintain data quality.

- **THC CEMS QA/QC Plan**

The Plant uses an ABB Multi- flame ionization detector (FID) 14 analyzer which uses a FID for the measurement of THC and is located on the Main Stack. The PC MACT THC CEMS QA/QC Plan describes in detail this analyzer which serves as the basis for assessing and maintaining the quality of continuous THC emission monitoring data. The THC CEMS is in compliance with 40 CFR 63.1350(j) requirements and the THC CEMS data from the Main Stack is used to parametrically demonstrate compliance with the PC MACT Total Organic HAP limit of 12 ppmvd (40 CFR 63.1343(b), Table 1, Footnote 4).

The objective of the PC MACT THC CEMS QA/QC Plan is to provide documentation for the collection of THC emission data of known and acceptable quality and in sufficient quantity in order to parametrically demonstrate compliance with the PC MACT monitoring requirements applicable to the Plant.

The PC MACT THC CEMS QA/QC Plan also address other necessary support services and activities, such as manual methods source testing, data reduction, spare parts inventory control, and report preparation and submittal; all of which are required in order to maintain data quality.

- **PM CPMS QA/QC Plan**

The Plant uses a SICK DUSTHUNTER SP100 analyzer for the parametric measurement of particulate matter (PM) located on the Main Stack. The SICK DUSTHUNTER SP100 PM analyzer is a certified scattered light dust monitor for detecting low to medium concentrations of dust contained in dry flue gas and process gas. The SICK DUSTHUNTER SP100 CPMS is in compliance with 40 CFR 63.1350(b) requirements and the parametric PM CPMS data (i.e., analog or digital output signal) is used to demonstrate compliance with the parametric PC MACT PM emission limit established by the Plant which cannot be exceeded more than four times in a calendar year (40 CFR 63.1350(b)(iv)).

The PC MACT PM CPMS QA/QC Plan describes in detail this analyzer which serves as the basis for assessing and maintaining the quality of continuous parametric PM emission monitoring data. The objective of the PC MACT PM CPMS QA/QC Plan is to provide

documentation for the collection of PM emission data of known and acceptable quality and in sufficient quantity in order to demonstrate compliance with the PC MACT monitoring requirements applicable to the Plant.

The PC MACT PM CPMS QA/QC Plan also address other necessary support services and activities, such as manual methods source testing, data reduction, spare parts inventory control, and report preparation and submittal; all of which are required in order to maintain data quality.

- **COMS QA/QC Plan**

The COMS QA/QC Plan describes in detail the COMS analyzers used and presents the U.S. EPA established requirements for quality assurance, quality control, monitoring, record keeping, and reporting opacity levels in flue gases emitted from affected units. The COMS are governed by the regulations established under 40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 60 Appendix F, Quality Assurance Procedures, which include general requirements for the installation, certification, operation, and maintenance of the COMS.

- **Plant Operations and Maintenance (O&M) Plan**

Per the PC MACT Rule (40 CFR 63 Subpart LLL), the Plant is required to have established procedures for the proper operation and maintenance of all PC MACT Rule affected sources and air pollution control devices in order to meet PC MACT emissions limits and operating limits, including any applicable fugitive dust control measures for any open clinker piles located at the Plant per 40 CFR 63.1342 through 40 CFR 63.1348.

The O&M Plan is also required to address periods of Plant startup and shutdown. The O&M Plan satisfies the requirements of 40 CFR 63.1347(a).

- **Plant Opacity Monitoring Plan**

Per the PC MACT Rule, specifically 40 CFR 63.1350(f), the Plant is required to develop an Opacity Monitoring Plan in accordance with 40 CFR 63.1350(p)(1) through (4) and 40 CFR 63.1350(f)(1)(i) through (vii). The Plant Opacity Monitoring Plan is provided as Attachment A to this Plan and describes in detail the opacity limits, monitoring, recordkeeping, and reporting requirements for all applicable Plant PC MACT affected sources subject to an opacity limit.

3.3 Monitoring Procedures

- **Plant Procedure for Monitoring Using a Weigh Scale System**

This Plant procedure addresses 40 CFR 63.1350(d) requirements where the Plant is required to have installed, calibrated, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of kiln feed which is used to estimate the amount of clinker produced by the PH/PC Kiln system. The system of measuring clinker is required to be maintained within ±5 percent accuracy.

The hourly clinker production rate is calculated using a kiln-specific feed to clinker ratio based on reconciled clinker production determined by the Plant for accounting purposes and using recorded kiln feed rates. This ratio is updated monthly. If this ratio changes at the time of clinker reconciliation, the Plant will use the new ratio going forward, but it will not be used retroactively to change the clinker production rates previously estimated.

- **Plant Procedure for Monitoring Kiln Stack Volumetric Flowrate**

The Plant operates an ABB ACT-NT rack mount FTIR analyzer located on the Main Stack. This Plant procedure addresses 40 CFR 63.1350(n) requirements where the Plant is required to install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs 40 CFR 63.1350(n)(1) through 40 CFR 63.1350(n)(10), to continuously measure and record the stack gas volumetric flow rate. The stack gas volumetric flow rate data is used in conjunction with the Hg CEMS data to determine the Hg mass emissions rate in a unit of pounds per million tons of clinker and used to demonstrate compliance with the PC MACT PH/PC Kiln Hg emission limit.

- **Plant Procedure for Kiln Stack O_2 Monitoring**

The Plant operates a Servomex Model Pm1158 O_2 analyzer located on the Main Stack. The O_2 monitoring data is used to correct the THC and HCl CEM emission data to 7 percent oxygen. D/F emissions testing is conducted periodically per 40 CFR 63.1349(c) and the results are also corrected for 7% O_2. This Plant procedure addresses 40 CFR 63.1343(a) requirements.

- **Plant Procedure for Kiln Stack Moisture Monitoring**

The moisture content contained in the Main Stack is determined by measuring moisture using a ABB ACT-NT rack mounted FTIR analyzer located on the Main Stack, or alternatively, by using site specific stack moisture content data taken from past Plant stack tests which utilized U. S. EPA Test Method 4, "Determination of Moisture Content in Stack Gases" (40 CFR 60 Appendix A-3). Appropriate moisture corrections need to be made per 40 CFR 63.1343(a) when measuring a dry volumetric flow rate that is used when calculating the Hg emission rate.

- **Plant Procedure for Monitoring Kiln and ARS Baghouse Inlet Temperatures for D/F Parametric Monitoring**

This Plant procedure addresses 40 CFR 63.1350(g) requirements where the Plant is required to install, calibrate, maintain, and continuously operate a CMS to record the temperature of the exhaust gases at the inlet to the Kiln and ARS Baghouses. The inlet temperature data is used to parametrically demonstrate compliance with the D/F emission limit of 0.2 or 0.4 ng/dscfm (TEQ), depending if the inlet temperature measured during the most recent D/F performance tests are greater than 400 °F or less than 400 °F, respectively. Also, during periods of startup and shutdown the temperature limit may only be exceeded by no more than 10 percent per 40 CFR 63.1346. Thermocouples are used which have been calibrated to NIST standards and are changed by the Plant quarterly.

- **Standard Operating Procedure for Kilns and Clinker Coolers During Plant Startup and Shutdown**

Plant Standard Operating Procedures (SOPs) for startup and shutdown are utilized for both the PH/PC Kiln and Clinker Cooler. The Plant O&M Plan provides details of these procedures.

The PC MACT regulations governing startup and shutdown for existing kilns and clinker coolers are provided in 40 CFR 63.1346(g) and 40 CFR 63.1348(b)(9), respectively, and stipulate the "Work Practices" to be followed per 40 CFR 63.1343(a) for an existing kiln and existing clinker cooler located at an existing major source. Work practices for startup of an existing kiln mean the time from when a shutdown kiln first begins firing fuel until the kiln begins producing clinker. Further, startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first. Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

As described in 40 CFR 63.1346(a)(1) and (2), the Plant is required to monitor and record the Kiln and ARS Baghouses inlet temperature during periods of startup/shutdown where the inlet temperature limit may be exceeded by no more than 10 percent. The Plant will preheat the PH/PC Kiln with "clean fuels" until the temperature reaches 1,200°F. During periods of startup and shutdown the Plant will use Best Management Practices (BMPs) to minimize emissions. All air pollution control devices must be turned on and operating prior to combusting any fuel.

For the Clinker Cooler, the work practice standards cited in 40 CFR 63.1343(a) are provided in 40 CFR 63.1348(b)(9) where the Plant is required that all APCD's must be in operation during periods of Plant startup and shutdown.

4.0 Quality Control (QC) Activities (40 CFR 1350(p)(1)(iii) and(p)(4))

4.1 General

Quality Control (QC) is defined as the procedures, policies, and corrective actions necessary to ensure product quality. QC procedures are typically "routine activities". These routine activities include, but are not limited to, daily calibration checks, systems inspections, and routine preventative maintenance. The QC activities performed at the Plant are designed to ensure that monitoring and maintenance operations are conducted adequately and appropriately. Besides routine activities, QC activities can also range from performing CMS system installation to developing and implementing data handling/reporting procedures. QC activities are performed by the applicable Plant Departments.

Initial installation of any CMS will be carried out by the Plant in strict accordance with the procedures established by the CMS vendor and any attending regulatory requirements including the applicable EPA Performance Specifications (PS) and/or factory acceptance testing requirements. These QC procedures also include initial start-up, debugging, and inspection of the CMS to ensure proper operation.

A complete set of Operational and Maintenance (O&M) manuals for all components of the CMS's used at the Plant are maintained by the appropriately designated Plant personnel. These O&M manuals provide complete descriptions of the CMS's including theory, installation, operation, trouble shooting, repair, and general maintenance.

Further details regarding additional QC activities including data handling, compliance levels, calibrations, zero and spans checks, loss of CMS data, spare parts, and other relevant topics related to QC activities associated with the CMS's are discussed in the applicable PC MACT CEMS, CPMS, and COMS QA/QC Plans. Additionally, the Plant's O&M Plan provides further relevant discussion of opacity monitoring, open clinker storage piles, O&M procedures, recordkeeping, and reporting requirements stipulated by the PC MACT Rule.

It is important to note that QC activities differ from Quality Assurance (QA) activities. QA is defined as the series of checks performed to ensure the QC procedures are functioning properly. QA activities include, but are not limited to, calibration gas audits, performing Relative Accuracy Test Audits (RATAs), and EPA PS testing which are discussed in further detail in Section 5.0 of this Plan.

4.2 Routine Performance Evaluations ((40 CFR 1350(p)(1)(iii))

4.2.1 Daily Calibration Checks

Each CEMS, CPMS, and COMS is automatically challenged to a known standard once every 24 hours. The DAHS calculates the percent difference from entered known values. The Plant

Instrumentation Supervisor or designee is responsible for verifying monitor response with the applicable PS specified in 40 CFR Part 60 Appendix F, at a minimum.

Recalibration of the CEMS, CPMS, and COMS will be performed if drift is indicated. Further details regarding QC procedures and acceptance criteria for the PM, Hg, THC, and HCl CEMS are provided in their respective PC MACT CEMS, PC MACT COMS, and PC MACT CPMS QA/QC Plans. Also, the Plant has established separate QC procedures applicable to the Kiln and ARS Baghouse inlet temperature monitors, the Main Stack volumetric flowrate monitor, O_2 monitor, and the permanent weigh scale system.

4.2.2 Systems Checks

System checks for each CMS analyzer consists of performing a zero drift check and a span drift check. Where applicable, system checks also include checking the calibration gas pressure, the compressed air supply, sample gas flow rates, and performing weekly, monthly, and bi-annual maintenance on each CMS analyzer. Also, where applicable, the system check includes performing a quarterly calibration gas audits for all CMS's and performing a monthly inspection of the permanent weigh scale system.

4.2.3 Routine Preventative Maintenance

Routine preventive maintenance is a regularly scheduled set of activities designed to prevent problems before they occur. Routine maintenance is performed on all the CMS systems, including the CEMS, CPMS, and COMS utilizing procedures provided in their respective PC MACT Hg, HCl, and THC CEMS QA/QC Plans, PM CPMS QA/QC Plan, COMS QA/QC Plan, and the Plant O&M Manual. Additional information on operations and maintenance plans and procedures is provided in Section 3.0 of this Plan.

5.0 Quality Assurance Activities (40 CFR 63.1350(p)(2)(ii))

5.1 Ongoing QA Activities

The Plant performs ongoing quality assurance (QA) activities per 40 CFR 60 Appendices A, B, and F to assess the accuracy of the CEMS, CPMS, and COMS which are used to demonstrate compliance with PC MACT standards (i.e., emission limits). Verification of the operational status includes completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the monitoring systems. Further details on QA activities associated with the CEMS, CPMS, and COMS can be found in the PC MACT Hg, HCl, and THC CEMS QA/QC Plans, PM CPMS QA/QC Plan, and COMS QA/QC Plan which are kept on file at the Plant.

5.2 Quality Assurance Procedures

The purpose of QA procedures is to ensure that the CEMS, COMS, and the CPMS provide accurate and reliable data. These procedures compare the pollutant/diluent values obtained from the CEMS to values obtained by the EPA Reference Method or an approved alternative testing method. The results of these tests provide verification of the continued comparability of the CEMS data to data collected by and compared to outside references. The procedures for these tests are published in EPA 40 CFR Part 60, Appendices A, B, and F. For the COMS and PM CPMS procedures are published in 40 CFR 60, Appendix B, Performance Specification 1, 40 CFR 60, Appendix F; Quality Assurance Procedures.

Per 40 CFR 1350(d)(2), each quarter the Plant will determine, record, and maintain a record of the ongoing accuracy of the permanent weigh scale system for measuring hourly feed mass flow for the PH/PC Kiln. The Plant maintains a copy of this procedure at the Plant.

5.3 Relative Accuracy Test Audit (RATA)

A Relative Accuracy Test Audit (RATA) as described in EPA's, 40 CFR 60 Appendix B is a test designed to assess the accuracy of the applicable CMS monitors relative to the appropriate EPA reference method tests. The RATA for the applicable CMS's is conducted in accordance with the applicable U.S. EPA Test Methods and U.S. EPA Performance Specifications. Further details regarding QA procedures for COMS, PM CPMS and the Hg, THC, and HCl CEMS are provided in the PM CPMS QA/QC Plan, COMS QA/QC Plan, and the Hg, THC, and HCl CEMS QA/QC Plans.

The Plant is responsible for hiring the RATA contractor and providing appropriate notification to the state. Additionally, designated Plant personnel will oversee the performance of the RATA and assemble and provide the required CMS data during the conduct of the RATA. The contractor is responsible for preparing the RATA report and using applicable Plant emission data and information which will be provided by the Plant. All RATA data and records will be kept by the Plant.

5.3.1 RATA Testing Prerequisites

Prior to the actual RATA testing procedures, several testing prerequisites will be performed. Testing prerequisites include but are not limited to the following:

- Verify the availability of all personnel required to perform testing,
- Verify that all schedule maintenance of the CMS has been performed,
- Verify that the test location conditions are adequate for testing, and that necessary support services are available,
- Review the applicable Reference Methods contained in 40 CFR Part 60 Appendices. Also review applicable Performance Specifications contained in 40 CFR Part 60, Appendix B and relevant and applicable Methods, and
- Submit RATA Notification. Per 40 CFR 63.9(g)(1) a notification of the date for any scheduled performance evaluation must be submitted to the state in writing at least 60 calendar days prior to when the performance evaluation is scheduled to begin. Per 40 CFR 63.2 *Performance evaluation* means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

5.3.2 RATA Testing Procedures

The following procedures will be conducted before, during, and after RATA testing.

- Verify that the CMS operating conditions are "in control" by conducting a systems audit.
- Notify applicable Plant personnel and the RATA contractor of the testing schedule and request notification form the Plant Control Room if any condition arises that would result in less than a 50 percent stable load during the RATA.
- Obtain copies of CMS reports covering the test period.
- Perform the post-test calibration and document the results of the calibration.

5.3.3 RATA Data Reduction and Analysis

The results of the manual Reference Method (RM) tests, as part of the RATA, are calculated according to procedures included in EPA's 40 CFR Part 60, Appendix A.

5.4 Relative Accuracy Calculations

The calculation procedure for relative accuracy as described in EPA's, 40 CFR 60, Appendix B is a test designed to assess the accuracy of the applicable CMS monitors relative to the

appropriate EPA RM tests. The RATA calculations for the applicable CMS systems are conducted in accordance with applicable U.S. EPA Test Methods. Further details regarding QA procedures for Hg, THC, and HCl are provided in their respective PC MACT CEMS QA/QC Plan.

A calibration check must be conducted at least daily for determination of zero and upscale calibration drift. Each day, the COMS and PM CPMS status indicators and final recording device must be checked for faults and/or alarms associated with the COMS and PM CPMS. A calibration error test shall be performed on each COMS and PM CPMS at least once every calendar quarter using neutral density audit filters. . Further details regarding QA procedures for are provided in their respective PC MACT COMS and PM CPMS QA/QC Plan.

5.5 Calibration Gas Audit

A calibration gas audit (CGA) is performed quarterly for each CEMS monitor for each quarter in which a RATA is not conducted. Refer to Section 5.2.1 of the respective PC MACT CEMS QA/QC Plans for a discussion of CGA procedures. The CGA is performed in accordance with the requirements specified in Appendix F to 40 CFR Part 60. For additional information on use of CGA's as part of applicable CEM RATA procedures refer to the applicable EPA Test Methods. Designated Plant personnel perform the CGA.

The CGA results are maintained on file by the Plant. The audit calibration gases are introduced at the CEM probe's injection port. The CEMS is challenged at two calibration levels (low-, and mid-). The two calibration gas levels are defined by 40 CFR Part 60 as: (1) low-level concentration is 20 to 30% of span and (2) mid-level concentration is 50 to 60% of span.

6.0 Performance Evaluations (40 CFR 63.1350(p)(3))

6.1 General

Performance evaluations (i.e., performance tests) will be performed in accordance with applicable EPA 40 CFR 60 Appendix B requirements. The required PC MACT performance testing requirements are specified in 40 CFR 63.1349.

The required applicable Appendix B Reference Method testing will be conducted by a competent and professional testing contractor hired by the Plant, and performed in accordance with approved EPA procedures. If the performance evaluation does not produce acceptable results, corrective actions will be taken and the performance evaluation will need to be again performed. Full documentation of all corrective actions performed is required. Further details regarding the conduct and content of performance evaluations (i.e., systems appraisals) for each CMS are provided in the respective CEMS QA/QC Plans, PM CPMS QA/QC Plan, and COMS QA/QC Plan.

6.2 Report Emission Test Requirements

40 CFR 63.1349(b) specifies emission test requirements for PM (b)(1), Opacity (b)(2), D/F (b)(3), THC (b)(4), Hg (b)(5), HCl (b)(6), Total Organic HAPs (b)(7), and HCl with SO_2 Monitoring (b)(8). Applicable 40 CFR 63.1349(b) emission test requirements will be reported by the Plant.

6.3 Performance Test Notification and Reporting

As described in 40 CFR 63.7(c)(2)(i), the Plant will need to make available to the applicable regulatory authority prior to conducting the performance test, if requested, a specific performance test plan (i.e., Testing Protocol) which needs to be followed during the conduct of the performance testing. Per 40 CFR 63.1349(e), the Plant must notify the WV DEP in writing of its intent to conduct a performance test at least 60 calendar days before it is scheduled to begin.

The Plant is required to document performance test results in a complete test report that contains the information required by paragraphs (a)(1) through (a)(10) of 40 CFR 63.1349, as well as all other relevant information. See Sections 8.2 and 8.3 of this Plan for specific requirements and the content of the Performance Test Report.

The Performance Test Report will need to be submitted no later than 60 days following the conduct of the performance test and signed by a responsible company official.

6.4 Performance Test Frequency

Performance tests are required to be performed every 30 months for affected sources that are subject to a D/F, Organic HAP (in lieu of a THC limit), or HCl (only if you use a wet or dry

scrubber or tray tower) emissions limit. A performance test for all PC MACT affected sources subject of a PM emission limit is required to be repeated every 12 months.

Performance tests for THC, Hg, and HCl (only if you are not using a wet or dry scrubber or tray tower) where these three pollutants are monitored using a CEMS, have to be conducted only during the initial performance test.

6.5 Conditions of Performance Tests

Conduct performance tests under such conditions as specified in the PC MACT Rule. Upon request, the Plant will need to make available to the WV DEP any records that may be necessary to determine the Plant conditions at the time of the conduct of any performance test.

7.0 Recordkeeping and Reporting (40 CFR 63.1350(p)(2)(iii))

7.1 General

As described in the Plant O&M Plan, appropriate documentation of the operating, maintenance, monitoring, and inspection activities conducted pursuant to the O&M Plan will be maintained on file at the Plant in accordance with applicable PC MACT requirements. Also, ongoing recordkeeping and reporting will be performed in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

The Plant will record all relevant files in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files will be retained by the Plant for a period of least five years following the date of each occurrence, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data will be retained at the Plant. The remaining three years of data may be retained by the Plant at an offsite location.

7.2 Performance Test Report Outline

Per 40 CFR 63.1349(a), after the conduct of a performance test, a Performance Test Report needs to be prepared and specifically address the following, as well as all other relevant information:

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish parameters for monitoring; and

(10) Any other information required by the performance test method.

7.3 Performance Test Reporting Requirements

The information specified below will need to be submitted no later than 60 days following the initial performance test and any subsequent performance tests.

- The performance test data as recorded
- The values for the site-specific operating limits or parameters established pursuant to 40 CFR 63.1349(b)(1), (3), (6), and (7), as applicable, and a description, including sample calculations, of how the operating parameters were established during the performance test.

All reports will need to be signed by a responsible company official or their designee.

Within 60 days after the date of completing each performance test, as defined in 40 CFR 63.2, which was conducted to demonstrate compliance with any standard covered by 40 CFR 63.1349, the Plant needs to submit the RATA data and performance test data, except for opacity data, to the EPA by successfully submitting the data electronically to the EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) found at the following EPA website, http://www.epa.gov/ttn/chief/ert/ert_tool.html/.

8.0 Operation and Maintenance of the CMS's (40 CFR 1350(p)(4))

All maintenance of the CMS's can be classified into one of two areas:

1. **Routine Preventive Maintenance:** A regularly scheduled set of activities designed to prevent problems before they occur.

2. **Non-Routine Preventive Maintenance:** A set of activities designed to prevent problems, but the need for it cannot be predicted, so it is done on an as-needed basis. Non-routine preventive maintenance is not discussed in the CEMS QA/QC Plans, PM CPMS QA/QC Plan, or the COMS QA/QC Plan because it is neither practical nor necessary to develop written procedures for it.

Routine maintenance is performed on all the CMS systems, including the CEMS, PM CPMS, and COMS, utilizing procedures provided in their respective CEMS QA/QC Plans, PM CPMS QA/QC Plan, COMS QA/QC Plan, and the Plant O&M Plan.

Attachment A: Opacity Monitoring Plan

PC MACT OPACITY MONITORING PLAN

ESSROC MARTINSBURG PLANT

MARTINSBURG, WEST VIRGINIA

Preparation Date:
July 2015

Prepared For:
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Effective Date:
September 9, 2015

PC MACT Opacity Monitoring Plan
Table of Contents

1.0 Introduction

2.0 PC MACT Regulatory Requirements

3.0 Opacity Emission Limits

4.0 Monitoring Requirements

5.0 Reporting Requirements

6.0 Recordkeeping Requirements

Appendix

A List of PC MACT Affected Sources

1.0 Introduction

This PC MACT Opacity Monitoring Plan was developed for the Martinsburg Plant (Plant) to meet PC MACT Rule 40 CFR 63.1350(f) and 40 CFR 63.1350(p) requirements. Specifically, 40 CFR 63.1350(f) requires that a Opacity Monitoring Plan must be developed in accordance with 40 CFR 63.1350(p)(1) through (4) and 40 CFR 63.1350(f)(1)(i) through (vii).

Since kiln systems and clinker coolers no longer have an applicable PC MACT opacity limit beginning on September 9, 2015, the Plant is required to only perform visible emission monitoring (Method 22) and opacity monitoring (Method 9) for all other applicable Plant PC MACT affected sources, as defined in 40 CFR 63.1340(b) to (c), to demonstrate compliance with their PC MACT opacity limits.

Alternatively, the Plant has an option of using a Bag Leak Detection System (BLDS) or a continuous opacity monitoring system (COMS) to demonstrate compliance with each PC MACT affected source's opacity limit. The Plant is using COMS on Finish Mill #1 and Finish Mill #2 to demonstrate compliance with the PC MACT opacity limit.

The PC MACT Opacity Monitoring Plan consists of this Introduction (Section 1.0), PC MACT Regulatory Requirements (2.0), Opacity Limits (3.0), Monitoring Requirements (4.0), Reporting Requirements (5.0), Recordkeeping Requirements (6.0), and a List of PC MACT Affected Sources (Appendix A).

2.0 PC MACT Regulatory Requirements

The following provides a summary of applicable PC MACT opacity regulatory requirements.

- 40 CFR 63.1343(b), Table 1, Item 13, presents the opacity limit which is applicable to the three existing Plant finish mills.

- 40 CFR 63.1345, Emissions Limits for PC MACT Affected Sources Other Than Kilns, Clinker Coolers, and New or Reconstructed Raw Material Dryers, provides the opacity limit which is applicable to Plant PC MACT affected sources other than those listed above. Specifically, the Plant PC MACT affected sources include raw material, clinker, and finished product storage bins; conveying system transfer points; bagging systems; and bulk loading and unloading systems, (herein referenced as "material handling points").

- 40 CFR 63.1348(b)(3), Continuous Monitoring Requirements for Opacity Compliance, requires that the Plant, since it is subject to the opacity limit specified in 40 CFR 63.1345, demonstrate compliance using the monitoring methods and procedures specified in 40 CFR 63.1350(f), which is based on the maximum 6-minute average opacity exhibited during the performance test period. The Plant also is required to initiate corrective actions within 1-hour of detecting a visible emission above the PC MACT affected source's opacity limit.

- 40 CFR 63.1349(b)(2), Initial Opacity Tests, requires the Plant, since the Plant is subject to an opacity limit, to perform an initial opacity test on each PC MACT affected source in accordance with Method 9 of 40 CFR 60 Appendix A-4. The duration of this Method 9 performance test is required to be 3-hours (consisting of 30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1-hour if the conditions of 40 CFR 63.1349(b)(2)(i) through (b)(2)(ii) are applicable. Specifically, 40 CFR 63.1349 (b)(2)(i) specifies that there are no individual readings greater than 10 percent opacity and 40 CFR 63.1349 (b)(2)(ii) specifies that there are no more than three readings of 10 percent for the first 1-hour period.

- 40 CFR 63.1349(d) Performance Test Reporting Requirements. The Plant is required to submit the information specified in 40 CFR 63.1349(d) for all performance testing required under 40 CFR 63.1349(b).

- 40 CFR 63.1350(f), Opacity Monitoring Requirements. The Plant, since it is subject to a opacity limit specified in 40 CFR 63.1345, is required to conduct opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) and also be in accordance with this PC MACT Opacity Monitoring Plan which is required to be developed by 40 CFR 63.1350(p). Specifically, the PC MACT Opacity Monitoring Plan is required to be developed in accordance with requirements defined in 40 CFR 63.1350(p)(1) through (4) and (o)(5), if applicable.

- 40 CFR 63.1350(p), Development of Monitoring Plans. 40 CFR 63.1350(p)(1-4) provides guidance for the development of monitoring plans for each continuous monitoring system (CMS). CMS is defined by 40 CFR 63.2 as "a comprehensive term that may include, but is not limited to, continuous emission monitoring systems (CEMS), continuous opacity monitoring systems (COMS), continuous parameter monitoring systems (CPMS), or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation." As of September 9, 2015, the Plant only utilizes manual monitoring (i.e., Method 22 and Method 9) to measure visible emissions and opacity from applicable PC MACT affected sources subject to an opacity limit except for Finish Mill #1 and Finish Mill #2 which monitor opacity using COMS.

- 40 CFR 63.1350(p)(1) requires information specific to COMS, CEMS, and CPMS to be included in the monitoring plan, such as installation details, performance and equipment specifications, and calibration procedures. This information is not applicable to the manual monitoring (Method 22/Method 9) conducted by the Plant to measure visible emissions and opacity from applicable PC MACT affected sources but is applicable for the use of COMS to monitor opacity from Finish Mill #1 and Finish Mill #2 and is addressed in the Plant's COMS QA/QC Plan.

- 40 CFR 63.1350(p)(2) requires the monitoring plan to address the following:

  - Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii). These are addressed in the Plant's Operation and Maintenance Plan.

  - Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). This requirement is not applicable to the manual monitoring (Method 22/Method 9) conducted by the Plant to measure visible emissions and opacity from applicable PC MACT affected sources but is applicable for the use of COMS to monitor opacity from Finish Mill #1 and Finish Mill #2 and is addressed in the Plant's COMS QA/QC Plan.

  - Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). Reporting requirements are provided in Section 5.0 of this Opacity Monitoring Plan. Recordkeeping requirements are provided in Section 6.0 of this Opacity Monitoring Plan.

- 40 CFR 63.1350(p)(3) requires the Plant to conduct a performance evaluation of each CMS. This requirement is not applicable to the manual monitoring (Method 22/Method 9) conducted by the Plant to measure visible emissions and opacity from applicable PC MACT affected sources but is applicable for the Plant's use of COMS on Finish Mill #1 and Finish Mill #2 to monitor opacity and is addressed in the Plant's QA/QC Plan.

- 40 CFR 63.1350(p)(4) requires the Plant to operate and maintain the CMS in continuous operation. This requirement is not applicable to the manual monitoring (Method

22/Method 9) conducted by the Plant to measure visible emissions and opacity for applicable PC MACT affected sources but is applicable for the use of COMS to monitor opacity from Finish Mill #1 and Finish Mill #2.

- 40 CFR 63.1353(b)(3), Notification Requirements, requires the Plant to notify the West Virginia Department of Environmental Protection (WV DEP) of any opacity and visible emission observations that will be conducted as required by 40 CFR 63.1349 and be performed in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).

- 40 CFR 63.1355 presents details of the PC MACT Rule recordkeeping requirements.

3.0 Opacity Limits

- **Finish Mills**

The three Plant finish mills have a 10 percent opacity limit.

- **PC MACT Affected Sources Which are Material Handling Points**

The PC MACT affected sources which are considered to be Plant material handling points have a 10 percent opacity limit.

4.0 Opacity Monitoring Requirements

4.1 Material Handling Points

The following describes the procedures used to periodically conduct visual emissions monitoring of PC MACT affected sources which are material handling points.

The Plant routinely performs Method 22 and Method 9 tests which meet the PC MACT Rule requirements specified below. Per 40 CFR 63.1350(f) of the PC MACT Rule, the Operations and Maintenance (O&M) Plan includes procedures to be used to periodically monitor PC MACT affected sources which have an opacity limit. These requirements include:

Conducting a **monthly 10-minute** visible emissions test **(Method 22)** of each PC MACT affected source in accordance with Method 22 of 40 CFR 60 Appendix A-7. The performance test is required to be conducted while the PC MACT affected source is in operation.

If no visible emissions are observed in **six consecutive monthly** tests for any PC MACT affected source, the Plant may decrease the frequency of performance testing from monthly to semi-annually for that PC MACT affected source. If visible emissions are observed during any semi-annual test, the Plant is required to resume performance testing of that PC MACT affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

If no visible emissions are observed during the **semi-annual** test for any PC MACT affected source, the Plant may decrease the frequency of performance testing from semi-annually to **annually** for that PC MACT affected source. If visible emissions are observed during any annual performance test, the Plant is required to resume performance testing of that PC MACT affected source on a **monthly** basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

If visible emissions are observed during any Method 22 performance test, the Plant is required to conduct a **30-minute** opacity observation **(Method 9), recorded at 15-second intervals**, in accordance with Method 9 as specified in 40 CFR 60 Appendix A-4. The Method 9 performance test is required to **begin within 1-hour** of any observation of visible emissions.

If the results of the Method 9 visible emissions observations indicate that the **10 percent opacity** threshold is exceeded, this will be noted in the plant environmental records. Plans will be developed and a work order will be written to perform maintenance and/or equipment modifications as necessary to ensure that emissions return to and remain at levels below 10 percent opacity.

Also, any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring. The enclosures for these transfer points are required to be operated and maintained as total enclosures on a continuing basis as specified in the Plant PC MACT O&M Plan.

If any partially enclosed or unenclosed conveying system transfer point is located in a building, the Plant is required to conduct a Method 22 performance test according to the requirements of 40 CFR 63.1350(f)(1)(i) through (iv), as specified above, for each such conveying system transfer point located within the building, or for the building itself.

If visible emissions from a building are monitored, the requirements of 40 CFR 63.1350(f)(1)(i) through (iv) apply to the monitoring of the building, and the Plant is required to also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

4.2 Finish Mills

For the three finish mills, the Plant uses a COMS system to measure opacity on Finish Mill #1 and Finish Mill #2 and monitors opacity by conducting daily visible emissions observations (Method 22) of the mill sweep and separator baghouses (i.e., PM control devices (PMCD)) for Finish Mill #3 in accordance with the procedures of Method 22 specified in 40 CFR 60 Appendix A-7.

Method22/Method 9

The daily Method 22 test is required to be conducted while the PC MACT affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). The duration of the Method 22 performance test is required to be 6-minutes.

If visible emissions are observed during any Method 22 visible emissions test, the Plant is required to perform within 24 hours of the end of the Method 22 test in which visible emissions were observed, a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test.

If visible emissions are still observed during the follow-up Method 22, the Plant is required to conduct a visual opacity test (Method 9) of each PC MACT affected source from which visible emissions were observed in accordance with Method 9 of Appendix A of 40 CFR Part 60. The duration of the Method 9 test is required to be 30-minutes per 40 CFR 63.1350(f)(2)(ii).

COMS

Per 40 CFR 63.1350(f)(4)(i), since the Plant has chosen to install a COMS in lieu of conducting the daily visible emissions testing on Finish Mill #1 and #2, then the COMS must be installed at the outlet of the PM control device of the finish mill and the COMS

must be installed, maintained, calibrated, and operated as required by the general provisions of 40 CFR 63 Subpart A and according to PS-1 of 40 CFR 60 Appendix B.

The COMS measures opacity on Finish Mills #1 and #2 stacks as a percentage of light passing through the gases compared to the reference light beam originating from the source. The COMS consist of four major components: the transmissometer, the terminal control box, the air-purging system and the remote control unit and data acquisition equipment.

The COMS undergoes an automatic daily calibration control cycle that runs at regular intervals. Specifically, a calibration check is conducted daily for determination of zero and upscale calibration drift. Also, a calibration error test is performed on each COMS at least once every calendar quarter using neutral density audit filters.

Field check verification of the COMS can be performed by conducting a manual Method 9 test.

If a COMS is ever found to be malfunctioning, then the Plant must conduct daily Method 22 visible emissions observations on the finish mill until the COMS returns to normal operation.

The Plant COMS QA/QC Plan contains all required information pertaining to the COMS as specified in 40 CFR 63.1350(p)(1)- (4), as presented in Section 2.0 of this Plan.

4.3 Corrective Actions and Other Required Information

If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs by 40 CFR 63.1350(f)(1) (i.e., material handling points) or (2) (i.e. finish mills), the Plant is required to **initiate, within 1-hour**, the corrective actions specified in the Plant PC MACT O&M Plan as required by 40 CFR 63.1347.

The Plant COMS QA/QC Plan, Site Specific Monitoring Plan, and the O&M Plan provide information on the necessary corrective action required for the COMS systems.

5.0 Reporting Requirements

40 CFR 63.1354(b)(2) and 40 CFR 63.10(d)(3) require the Plant to report the opacity results from tests that are required by 40 CFR 63.1349.

The Plant is required to report per 40 CFR 63.1354(b)(9)(vii) each violation of the opacity limit and report the date, duration, and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests, and the results of those actions.

40 CFR 63.1354(c) requires the Plant to report all failures to meet the opacity limit due to a Plant malfunction. For each failure to meet the opacity limit caused by a malfunction, the Plant is required to report each failure in the Semi-Annual PC MACT Compliance Report (Report) required by 40 CFR 63.1354(b)(9). The Report is required to contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The Report is required to list for each event the PC MACT affected source or equipment, the estimated opacity emitted over the emission limit for which the PC MACT affected source failed to meet a standard (e.g., 20 percent opacity which is 10 percent over the 10 percent opacity limit for the PC MACT affected source), and a description of the method used to estimate opacity. Also, the Report is required to include a description of actions taken by the Plant during the malfunction of the PC MACT affected source for minimizing emissions in accordance with 40 CFR 63.1348(d), including actions taken to correct the malfunction.

6.0 Recordkeeping Requirements

Recordkeeping requirements are presented in 40 CFR 63.1355. The Plant is required to maintain files of all information (including all reports and notifications) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files are required to be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data are required to be retained onsite at the Plant. The remaining three years of data may be retained offsite. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

The Plant is required to maintain records for each PC MACT affected source as required by 40 CFR 63.10(b)(2) and (b)(3) and

(1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9,

(2) All records of applicability determination, including supporting analyses, and

(3) If the Plant has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a PC MACT affected source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

Per 40 CFR 63.1355(g)(1), the Plant is required to keep records of the date, time, and duration of each malfunction that causes an PC MACT affected source to fail to meet a PC MACT applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record is required to list the PC MACT affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the PC MACT affected source failed to meet a standard, and a description of the method used to estimate the emissions.

Per 40 CFR 63.1355(g)(2), the Plant is required to keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

Per 40 CFR 63.1355(h), for each exceedance of the opacity limit, the Plant is required to keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.

Appendix A
List of PC MACT Affected Sources

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
RAW MATERIAL HANDLING							
EP37.08	-	EP37.08	Limestone/Clinker Storage Pile (Quarry)	FUGITIVE	Operated in accordance with the fugitive dust emission control measures as identified in Section 7.0 of this O&M Plan.		
EP37.11		EP37.11	Limestone/Clinker Storage Pile (Outside Craneway)	FUGITIVE	Operated in accordance with the fugitive dust emission control measures as identified in Section 7.0 of this O&M Plan.		
EP37.12		EP37.12	Limestone/Clinker Transfer to Craneway Storage Building	FUGITIVE	Building Sides/Roof/Vent		
CD39.03	Raw Material Discharge D\C 1	EP39.03.03	Shale bin to feeder	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP39.03.04	Shale bin feeder to conveyor				
		EP39.02.01	Limestone mix bin to feeder				
		EP39.02.02	Limestone mix feeder to conveyor				
		EP39.08.02	Sand silo to feeder				
		EP39.08.03	Sand silo feeder to conveyor				
		EP39.07.02	Pyrite silo to feeder				
		EP39.07.03	Pyrite silo feeder to conveyor				
CD39.04	Raw Material Discharge D\C 2	EP39.04.02	Shale silo 2 to feeder	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP39.04.03	Shale silo 2 feeder to conveyor				
CD39.06	Raw Mill Feeding D\C	EP39.06.01	Raw Mill Feed Conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD31.01	Flyash Tank No.1 D\C	EP31.01	Fly Ash Tank #1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
EP39.09	-	EP39.09	Inert Raw Material Storage Pile (Within Mines)	FUGITIVE	Operated in accordance with the fugitive dust emission control measures as identified in Section 7.0 of this O&M Plan.		
RAW GRINDING AND KILN FEED							
CD40.01	Raw Mill High Zone D\C	EP40.01.01	RM Feed Conveyor to conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP40.01.02	Conveyor to split				
		EP40.01.03	Split to hopper				
		EP40.02.03	Elevator to conveyor				
		EP40.04.01	Split to Raw Mill				
CD40.02	Raw Mill Low Zone D\C	EP40.02.01	Conveyor to split	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
		EP40.02.02	Split to bucket elevator				
		EP40.04.02	Raw Mill to conveyor				
		EP40.02.04	Conveyor to bucket elevator				
CD40.05	Raw Meal Air Slide D\C	EP40.05	Raw Meal Conveying Equipment	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD40.06	Homo Silo Feeding D\C	EP40.06	Homogenizing Silo Feeding Equipment	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD40.07	Homo Silo Discharge D\C	EP40.07	Homogenizing Silo Discharging Equipment	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD40.08	Top of Homogenizing Silo	EP40.08	Top of Homogenizing Silo	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD42.02	Kiln Feeding Bucket Elevator D\C	EP42.02	Kiln Feeding Bucket Elev DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD42.03	Kiln Feeding D\C 1	EP42.03	Kiln Feed Belt	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD42.05	Kiln Feeding D\C 2	EP42.05	Kiln Feed Belt	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
PREHEATER/PRECALCINER KILN AND CLINKER COOLER & SOLID FUEL GRINDING SYSTEM							
CD41.04	Alternate Fuel Feeding System D/C	EP41.04	Alternate Fuel Feeding System	BAGHOUSE	Main Stack	Continuous	CEMS, CPMS
CD41.05	Alternate Fuel dosing System D/C	EP41.05	Alternate Fuel dosing System	BAGHOUSE	Main Stack	Continuous	CEMS, CPMS
CD42.04	Inline Raw Mill / PH/PC Kiln / Clinker Cooler & Bypass & Coal Mill D\Cs	EP42.04	Kiln System - Inline Raw Mill / PH/PC Kiln / Clinker Cooler	BAGHOUSE	Main Stack	Continuous	CEM, CPMS
		EP42.08	Kiln Bypass Baghouse DC	BAGHOUSE			
		EP41.03.01	Coal Mill	BAGHOUSE			
CD42.01	Cement Fringe Bin D\C	EP42.01	Cement Fringe Bin	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD42.06	Lime Storage D\C	EP42.06	Lime Storage for Scrubber System	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD42.07	Bypass Truck Spout Dedusting	EP42.07	Bypass Truck Spout Dedusting	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD31.02	Bypass Dust Tank D\C	EP31.02	Bypass Dust Tank	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD31.03	Bypass Dust Loadout D\C	EP31.03	Bypass Dust silo/loadout	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CLINKER/GYPSUM/FM ADDITIVE HANDLING AND STORAGE							
CD43.03	Clinker Storage Feeding D\C	EP43.05	Clinker conveyor to big clinker silo	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
CD43.19	Top of LA Clinker Silo DC	EP43.19	Top of LA Clinker Silo	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.20	Normal Clinker Bin at Pan Conveyor 73 DC	EP43.20	Normal Clinker Bin at Pan Conveyor 73	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.21	Top of Normal Clinker Silo DC	EP43.21	Top of Normal Clinker Silo	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.04	Small Clinker Storage Feeding D\C	EP43.04	Clinker conveyor to clinker silo	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.06	Small Clinker Storage Discharge D\C	EP43.06.01	Low Alkali Clinker Silo to upper conveyors	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP43.06.02	Upper conveyors to lower conveyor				
		EP43.06.03	Low Alkali Clinker silo to lower conveyor				
CD43.07	Clinker Storage Discharge D\C	EP43.07.01	Big clinker silo to upper conveyor1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP43.07.02	Big clinker silo to upper conveyor2				
		EP43.07.03	Big clinker silo to lower conveyor				
		EP43.07.04	Big clinker silo to short conveyor				
		EP43.07.05	Short conveyor to lower conveyor				
CD43.08	Finish Mill Conveying D\C1	EP43.08	Upper conveyor 1 to FM feed hoppers belt	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.09	Finish Mill Conveying D\C2	EP43.09	Lower conveyor to FM feed hoppers belt	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.13	Finish Mill Conveying D\C3	EP43.13	Upper conveyor 2 to FM feed hoppers belt	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.14	Finish Mill 1 & 2 Hoppers D\C	EP43.14	Conveyor to clinker feeding hoppers (FM1 &2)	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP43.15	Conveyor to lower conveyor (FM3)	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.16	Finish Mill 3 Hopper D\C	EP43.16	Lower conveyor to clinker feeding hopper (FM3)	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD43.17	Normal Clinker Bin - Bin Vent	EP43.17	Normal Clinker Bin - Bin Vent	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
EP26.06.03	-	EP26.06.03	Gypsum/Synthetic Gypsum truck unloading to storage hall	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
EP26.06.04	-	EP26.06.04	Clam bucket to gypsum/synthetic gypsum pile	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP26.06.05	-	EP26.06.05	Gypsum/synthetic gypsum pile to clam bucket	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP26.06.06	-	EP26.06.06	Clam bucket to gypsum/synthetic gypsum bin (FM1/2/3)	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP26.07.01	-	EP26.07.01	Limestone Pile to clam bucket	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP26.07.02	-	EP26.07.02	Clam bucket to limestone bin (FM1/2/3)	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.01	-	EP27.01	Conveyor to clinker hopper	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.02	-	EP27.02	Clinker hopper to crane	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.03	-	EP27.03	Crane to clinker pile	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP14.08	-	EP14.08	Clinker stockpile (Craneway)	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.04	-	EP27.04	Clinker pile to crane	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.05	-	EP27.05	Crane to clinker bins (FM1/2/3)	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.06	-	EP27.06	Transfer to Outdoor Clinker Storage Pile	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
EP27.07	-	EP27.07	Outdoor Clinker Storage Pile - Tarped	FUGITIVE	Operated in accordance with the fugitive dust emission control measures as identified in Section 7.0 of this O&M Plan.		
EP26.08	-	EP26.08	Outdoor Clinker Storage Pile Reclaim	FUGITIVE	Building Sides/Roof/Vent	Monthly	10 Minute Method 22
FINISH MILL SYSTEMS							
CD44.01	Finish Mill 2 Feeding D\C1	EP44.01	L.A. clinker bin to FM2 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.02	Finish Mill 1 Feeding D\C1	EP44.02	Clinker bin to FM1 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.03	Finish Mill 2 Feeding D\C2	EP44.03	Clinker bin to FM2 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.04	Finish Mill 2 Feeding	EP44.04.01	Limestone bin to FM2 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
	D\C3	EP44.04.02	Gypsum/synthetic gypsum bin to FM2 conveyor	BAGHOUSE			
CD44.05	Finish Mill 1 Feeding D\C 2	EP44.05.01	Limestone bin to FM1 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP44.05.02	Gypsum/synthetic gypsum bin to FM1 conveyor	BAGHOUSE			
CD19.02	Finish Mill 3 Baghouse D\C	EP19.01Pb	No. 3 Finish Mill Separator (Existing FM 10)	BAGHOUSE	DC Outlet	Daily	6 Minute Method 22
CD19.01	Finish Mill 3 Norblo D\C	EP19.01U	FM3 Feed bins to feeders	BAGHOUSE	DC Outlet	Daily	6 Minute Method 22
		EP19.01Pa.01	FM3 Feeders to belt conveyor 650	BAGHOUSE			
		EP19.01Pa.02	Belt conveyor 650 to FM3	BAGHOUSE			
		EP19.02	Finish Mill 3	BAGHOUSE			
CD44.06	Finish Mill 1 Conveying D\C	EP44.06	FM1 Conveyor to conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.07	Finish Mill 1 High Zone D\C	EP44.07.01	Elevator to FM1 conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP44.07.02	FM1 Conveyor to bin	BAGHOUSE			
		EP44.07.03	Conveyor to Finish Mill 1	BAGHOUSE			
CD44.08	Finish Mill 1 Low Zone D\C	EP44.08.01	Finish Mill 1 to Conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP44.08.02	Bin to FM1 conveyor	BAGHOUSE			
		EP44.08.03	FM1 Conveyor to bucket elevator	BAGHOUSE			
CD44.09	Finish Mill 1 D\C	EP44.09	Finish Mill 1	BAGHOUSE	DC Outlet	Daily	6 Minute Method 22
CD44.13	Finish Mill 1 Discharge D\C	EP44.13	Finish Mill 1 Conveying	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.14	Finish Mill 2 Conveying D\C	EP44.14	FM2 Conveyor to conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.10	Finish Mill 2 High Zone D\C	EP44.10.01	FM2 Elevator to conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP44.10.02	FM2 Conveyor to bin	BAGHOUSE			
		EP44.10.03	Conveyor to Finish Mill 2	BAGHOUSE			
CD44.11	Finish Mill 2 Low Zone D\C	EP44.11.01	Finish Mill 2 to conveyor	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
		EP44.11.02	Bin to FM2 conveyor	BAGHOUSE			
		EP44.11.03	FM2 Conveyor to bucket elevator	BAGHOUSE			
CD44.12	Finish Mill 2 D\C	EP44.12	Finish Mill 2	BAGHOUSE	DC Outlet	Daily	6 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
CD44.15	Finish Mill 2 Discharge D\C	EP44.15	Finish Mill 2 Conveying	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.09 CD44.12	Finish Mill 1/2 Air Heater	EP44.16	Finish Mill 1/2 Air Heater	BAGHOUSE	DC Outlet	Daily	6 Minute Method 22
CD44.17	Finish Mills Reject Bin	EP44.17	Finish Mills Reject Bin	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.18	Finish Mill 1 Reject Elevator High Zone DC	EP44.18	Finish Mill 1 Reject Elevator High Zone	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD44.19	Finish Mill 2 Reject Elevator High Zone DC	EP44.19	Finish Mill 2 Reject Elevator High Zone	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CEMENT DISTRIBUTION							
CD45.01	Finish Mill 1 Airslides D\C	EP45.01	Finish Mill 1 airslides	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.02	Finish Mill 2 Airslides D\C	EP45.02	Finish Mill 2 airslides	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.03	Cement Silos Feeding D\C1	EP45.03	Finish Mill 1 to cement silos	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.04	Cement Silos Feeding D\C2	EP45.04	Finish Mill 2 to cement silos	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.05	Cement Silo A1 & A2 D\C	EP45.05	Cement Silo A1 & A2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.06	Cement Silo B1 & B2 D\C	EP45.06	Cement Silo B1 & B2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.07	Cement Silo C1 & C2 D\C	EP45.07	Cement Silo C1 & C2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.08	Truck Loadout 1 D\C	EP45.08	Bulk lane loadout 1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.09	Truck Loadout 2 D\C	EP45.09	Bulk lane loadout 2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.10	Truck Loadout 3 D\C	EP45.10	Bulk lane loadout 3	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.11	Truck Loadout 4 D\C	EP45.11	Bulk lane loadout 4	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.05	Middle Bank Silos 1 D\C	EP21.05	Middle Bank Silos 1 DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.06	Middle Bank Silos 2 D\C	EP21.06	Middle Bank Silos 2 DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.07	Middle Bank Silos 3 D\C	EP21.07	Middle Bank Silos 3 DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.08	Middle Bank Silos 4 D\C	EP21.08	Middle Bank Silos 4 DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
CD21.09	Middle Bank Silos 5 D\C	EP21.09	Middle Bank Silos 5 DC	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.10	Middle Bank Vent 1 D\C	EP21.10	Middle Bank Bin Vent 1 - Silos Inlet	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.11	Middle Bank Vent 2 D\C	EP21.11	Middle Bank Bin Vent 2 - Silos Inlet	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.12	South Middle Bank CP Pump DC	EP21.12	South Middle Bank CP Pump	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD21.13	North Middle Bank CP Pump DC	EP21.13	North Middle Bank CP Pump	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.12	Rail Loadout 1 D\C	EP45.12	Bulk rail loadout 1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.13	Rail Loadout 2 D\C	EP45.13	Bulk rail loadout 2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.14	Cement Analyzer D\C	EP45.14	Cement Analyzer	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.15	Transfer Airslide D\C at the Multi Cell	EP45.15	Transfer Airslide at the Multi Cell	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD45.16	Rail Transloader D\C	EP45.16	Rail Transloader	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.01	Truck Loadout Silo 1 D\C	EP46.01	Truck Loadout Silo 1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.02	Truck Loadout Silo 2 D\C	EP46.02	Truck Loadout Silo 2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.03	Truck Loadout Silo 3 D\C	EP46.03	Truck Loadout Silo 3	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.04	Truck Loadout Silo 4 D\C	EP46.04	Truck Loadout Silo 4	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.05	Truck Loadout Silo 5 D\C	EP46.05	Truck Loadout Silo 5	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.06	Truck Loadout 5 D\C	EP46.06	Bulk loadout 5 - Truck Loadout Silos	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD46.07	Truck Loadout 6 D\C	EP46.07	Bulk loadout 6 - Truck Loadout Silos	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD20.04	East Bank Silos 1 D\C	EP20.04	East Bank Silos 1	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD20.05	East Bank Silos 2 D\C	EP20.05	East Bank Silos 2	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD20.06	East Bank Silos 3 D\C	EP20.06	East Bank Silos 3	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD48.01	Packhouse D\C	EP48.01	Packhouse	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD23.01	N.E. PACKER D/C	EP23.01	Packer #1 N.E.	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD22.05	West Bank Silo #70/71 D\C	EP22.05	West Bank Silos #70/#71	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD22.06	West Bank Silo #72 D\C	EP22.06	West Bank Silos #72	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

MARTINSBURG PLANT
PC MACT Affected Source List

PSD Permit EP ID	CD Description	EU ID	EU Description	SOURCE TYPE	POINT OF COMPLIANCE	MONITORING FREQUENCY	MONITORING METHOD
CD22.07	West Bank Silo #84 D\C	EP22.07	West Bank Silos #84	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD22.08	West Bank Silo Loadout Spout D\C	EP22.08	West Bank Silos Loadout Spout	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22
CD22.09	Dry Flyash Weigh Bin D\C	EP22.09	Dry Flyash Weigh Bin/Alleviator	BAGHOUSE	DC Outlet	Monthly	10 Minute Method 22

BY-PRODUCT COKE MANUFACTURING

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Mountain State Carbon

54-009-00002

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Mountain State Carbon, LLC
Follansbee Plant, Follansbee, West Virginia
R30-00900002-2015

William F. Durham
Director

Issued: August 13, 2015 • Effective: August 27, 2015
Expiration: August 13, 2020 • Renewal Application Due: February 13, 2020

Permit Number: **R30-00900002-2015**
Permittee: **Mountain State Carbon, LLC**
Facility Name: **Follansbee Plant**
Permittee Mailing Address: **1851 Main Street, Follansbee, WV 26037**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Follansbee, Brooke County, West Virginia
Facility Mailing Address:	Same as above
Telephone Number:	(304) 527-5632
Type of Business Entity:	LLC
Facility Description:	Operate Coke Oven Batteries to Convert Coal into Coke
SIC Codes:	Primary 3312; Secondary N/A; Tertiary N/A
UTM Coordinates:	533.41 km Easting • 4465.76 km Northing • Zone 17

Permit Writer: Frederick Tipane

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits **3**

2.0 General Conditions **11**

3.0 Facility-Wide Requirements **20**

Source-specific Requirements

4.0 Coke Batteries, Pushing, and Quenching **35**

5.0 Boilers **82**

6.0 Coal Handling, Coke Sizing/Screening, and Coke and Breeze Screening **92**

7.0 Plant Roadways and Parking **99**

8.0 By-Product Plant, Coke Oven Gas Flare **104**

9.0 Emergency Air Compressor, and Emergency Generators **141**

APPENDIX A - 45CSR2 & 45CSR10 Monitoring Plans **147**

APPENDIX B - Compliance Determination Inspection Forms, and Chemical Suppressant Log **155**

APPENDIX C - Unpaved Roads & Areas; Paved Roads **160**

APPENDIX D - Monthly/Quarterly Opacity Reports per R13-2798 ..... **162**

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Battery #1 Group 001					
P001-1	F01	Charging on Battery #1	1917 1954	31.60 tons coal /hr and 227,000 tons coal/year	None
P001-2	F02	Topside Leaks from Battery #1	1917 1954	NA	None
P001-3	F03	Door and Offtake Leaks from Battery #1	1917 1954	NA	None
P001-4	Stack 01	Underfire Stack for Battery #1	1917 1954	31.6 tons coal/hr 22.1 tons coke/hr	None
P001-5	Stacks 05, F13, F14, F15	Pushing from Coke Oven Batteries #1, #2, and #3 (F13, F14, and F15).	1917 1954	97.2 tons coal/hr 68.1 tons coke/hr	Shed OBSC and Baghouse C01
OBSC	OBSC	Shed (control device)	1982	NA	Baghouse C01
C01	Stack 05	Batteries #1, #2, and #3 Pushing Baghouse (control device)	1982	300,000 cfm at 125 degrees F	NA
P008-1	Stacks S16, S17	Emergency Flares for Battery # 1	1994	314,000 scfm (total COG flow)	None
P008-2	Stacks S18, S19	Emergency Flares for Battery # 2	1994	314,000 scfm (total COG flow)	None
P008-3	Stack S20	Emergency Flares for Battery # 3	1994	314,000 scfm (total COG flow)	None
1E	S1	Quench Tower for Batteries 1-2-3	1917 1954 2008	68.1 tons coke/hr	C11
C11	S1	Batteries #1, #2, and #3 Quenching Baffle	1917 1954 2008	68.1 tons coke/hr	Baffles
Battery #2 Group 002					
P002-1	F04	Charging on Battery # 2	1917 1953	31.60 tons coal /hr and 227,000 tons coal/year	None
P002-2	F05	Topside Leaks from Battery # 2	1917 1953	NA	None
P002-3	F06	Door and Offtake Leaks from Battery # 2	1917 1953	NA	None
P002-4	Stack 02	Underfire Stack for Battery # 2	1917 1953	31.6 tons coal/hr 22.1 tons coke/hr	None
Battery #3 Group 003					
P003-1	F07	Charging on Battery # 3	1917 1953	34.0 tons coal /hr and 298,000 tons coal/year	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
P003-2	F08	Topside Leaks from Battery # 3	1917 1953	NA	None
P003-3	F09	Door and Offtake Leaks from Battery # 3	1917 1953	NA	None
P003-4	Stack 03	Underfire Stack for Battery # 3	1917 1953	34 tons coal/hr 23.8 tons coke/hr	None
Battery #8 Group 004					
P004-1	F10	Charging on Battery # 8	1976	152.6 tons coal /hr and 1,336,776 tons coal/year	None
P004-2	F11	Topside Leaks from Battery # 8	1976	NA	None
P004-3	F12	Door and Offtake Leaks from Battery # 8	1976	NA	None
P004-4	Stack 04	Underfire Stack for Battery # 8	1976	152.6 tons coal/hr 106.8 tons coke/hr	None
P004-5	Stack 06, F16	Pushing from Battery # 8	1976	152.6 tons coal/hr 106.8 tons coke/hr	Mobile Hood 8CS and Scrubber C02
8CS	8CS	Mobile Hood (control device)	1976	NA	Scrubber C02
C02	Stack 06	Battery # 8 Pushing Venturi Scrubber (control device)	1976	470,000 cfm	NA
P004-6	Stack 08a	Quenching for Battery # 8 (South quench tower)	1976	152.6 tons coal/hr and 106.8 tons coke/hr	Baffles C11a
C11a	Stack 08a	Batteries # 8 Quenching Tower Baffles (South quench tower) (control device)	1976	175 tons coke/hr	NA
P004-7	Stack 08b	Quenching for Battery # 8 (North quench tower)	2005	175 tons coke/hr	Baffles C11b
C11b	Stack 08b	Battery # 8 Quenching Baffles (North quench tower) (control device)	2005	175 tons coke/hr	NA
P008-4	Stacks 21, 22	Emergency Flares for Battery # 8	1994	1,660,300 scfm (total COG flow)	None
Boilers Group 005					
P017	Stack 11	Boiler # 6	1951 2004	90 MMBtu/hr coke oven gas	None
P018	Stack 11	Boiler # 7	1951 2004	90 MMBtu/hr coke oven gas	None
P019	Stack 12	Boiler # 8	1976 2004 2014	78.5 MMBtu/hr Natural gas	None
S1	E3	Boiler # 9	2004	98 MMBtu/hr coke oven gas/NG	None
S5	E4	Boiler # 10	2004	98 MMBtu/hr coke oven gas/NG	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Coal/Coke Handling Group 006					
P005	C07, F17	Coal Crushing	1917 1948	500 tons coal/hr and 4,380,000 tons coal/yr	None
Coal Handling Group 006					
P006	C08, F18	Coal Handling	1917 1948 1976	500 tons coal/hr and 4,380,000 tons coal/yr	None
1	F18	Barge Receiving	1917 1948 1976	500 tons coal/hr	None
1A	F18	Clamshell Rigs (2)	1917 1948 1976	500 tons coal/hr	None
2	F18	River Hopper A & B	1917 1948 1976	500 tons coal/hr	None
Conv. 1	F18	Conveyor No. 1	1917 1948 1976	500 tons coal/hr	None
Conv. 2	F18	Conveyor No. 2	1917 1948 1976	500 tons coal/hr	None
4	F18	Transfer Bin (Point A)	1917 1948 1976	500 tons coal/hr	None
5	F18	Track Hopper (Point B)	1917 1948 1976	500 tons coal/hr	None
Conv. A	F18	Conveyor A	1917 1948 1976	500 tons coal/hr	None
Conv. B	F18	Conveyor B	1917 1948 1976	500 tons coal/hr	None
Conv. B-1	F18	Conveyor B-1	1917 1948 1976	500 tons coal/hr	None
Conv. 3	F18	Conveyor No. 3	1917 1948 1976	500 tons coal/hr	None
10	F18	Balancing Bin (BB)	1917 1948 1976	500 tons coal/hr	None
11	F18	Transfer Car	1917 1948 1976	500 tons coal/hr	None
Conv. 4	F18	Conveyor No. 4	1917 1948 1976	500 tons coal/hr	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Conv. C	F18	Conveyor C	1917 1948 1976	500 tons coal/hr	None
18	F18	Breaker Bin 1	1917 1948 1976	500 tons coal/hr	None
19	F18	Breaker Bin 2	1917 1948 1976	500 tons coal/hr	None
20	F18	Breaker Bin 3	1917 1948 1976	500 tons coal/hr	None
21	F18	Breaker Bin 4	1917 1948 1976	500 tons coal/hr	None
22	F18	Breaker Bin 5	1917 1948 1976	500 tons coal/hr	None
23	F18	Breaker Bin 6	1917 1948 1976	500 tons coal/hr	None
C-1	F18	Conveyor C-1	1917 1948 1976	500 tons coal/hr	None
C-2	F18	Conveyor C-2	1917 1948 1976	500 tons coal/hr	None
C-3	F18	Conveyor C-3	1917 1948 1976	500 tons coal/hr	None
C-4	F18	Conveyor C-4	1917 1948 1976	500 tons coal/hr	None
C-5	F18	Conveyor C-5	1917 1948 1976	500 tons coal/hr	None
C-6	F18	Conveyor C-6	1917 1948 1976	500 tons coal/hr	None
C-7	F18	Conveyor C-7	1917 1948 1976	500 tons coal/hr	None
Conv. D	F18	Conveyor D	1917 1948 1976	500 tons coal/hr	None
Conv. E	F18	Conveyor E	1917 1948 1976	500 tons coal/hr	None
35	F18	Coal Bin Unloading to Old Block	1917 1948 1976	500 tons coal/hr	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
36	F18	Larry Cars (Unloading to Batteries # 1, 2, and 3 (37))	1917 1948 1976	97.2 tons/hr	None
Conv. H	F18	Conveyor H	1976	152.6 tons/hr	None
Conv. L	F18	Conveyor L	1976	152.6 tons/hr	None
Conv. M	F18	Conveyor M	1976	152.6 tons/hr	None
42	F18	Coal Bin	1976	152.6 tons/hr	None
43	F18	Larry Cars (Unloading to Battery # 8 (44))	1976	152.6 tons/hr	None
Storage Pile Group 006					
P009	F20	Coal Storage Piles	1917	NA	None
P010	F21	Coal Storage Piles	1917	NA	None
P011	F22	Coke Storage Piles	1917	NA	None
Coke Screening System Group 006					
S40 SS40-a SS40-b SS40-c SS40-d	E40	Spyder 516T Tracked Screening Unit with Load Out Conveyor	2009	125 TPY	Minimize Drop Height
P007-1	C09, F19	Coke Sizing and Screening and Handling	1917 1976	330 tons/hr	C09
SS1-A	F1	Station 1 Feedhopper/Conveyor	1978	125 ton/hr	N
SS1-B	F2	Station 1 3-Deck Screen	1978	125 ton/hr	Full enclosure
SS1-C	F3	Station 1 - 1/4" - 3/4" Coke Conveyor	1978	125 ton/hr	N
SS1-D	F4	Station 1 - Less than 1/4" Coke Conveyor	1978	125 ton/hr	N
SS1-E	F5	Station 1 - Greater than 1" Coke Conveyor	1978	125 ton/hr	N
SS2-A	F6	Station 2 Feedhopper/Conveyor	1989	125 ton/hr	N
SS2-B	F7	Station 2 3-Deck Screen	1989	125 ton/hr	Full enclosure
SS2-C	F8	Station 2 - 1/4" - 3/4" Coke Conveyor	1989	125 ton/hr	N
SS2-D	F9	Station 2 - Less than 1/4" Coke Conveyor	1989	125 ton/hr	N
SS2-E	F10	Station 2 - Greater than 1" Coke Conveyor	1989	125 ton/hr	N
Plant Roads and Parking Group 007					
P023	F27	Unpaved Roads and Parking Lots	1917	NA	DSCS and Sweeping
		Paved Roads	1999	NA	Flushing and Vacuum Sweeping
By-Product Group 009					
P021	F29	By-Products Plant	1978	80 MMCF/day coke oven gas	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Process Tanks on By-Product Plant Group 009					
P021-1	C06, F29	Tar Bottom Final Coolers Number 1	1990 1991	400 gals	None
P021-1	C06, F29	Tar Bottom Final Coolers Number 2	1990 1991	400 gals	None
P021-1	C06, F29	Tar Bottom Final Coolers Number 3	1990 1991	400 gals	None
P021-2	C06, F29	Tar Intercepting Sump	1990 1991	12,000 gals	None
P021-3	C06, F29	Tar Storage Number 1	1990 1991	240,000 gals	None
P021-3	C06, F29	Tar Storage Number 2	1990 1991	240,000 gals	None
P021-4	C06, F29	Light Oil Condenser	1995 1996 2000	17,952 gals Vapor Condenser	None
P021-5	C06, F29	Light Oil Sump	1990 1991	40,000 gals	None
P021-6	C06, F29	Primary Light Oil Separator	1990 1991	3,000 gals	None
P021-7	C06, F29	Secondary Light Oil Separator	1990 1991	350 gals	None
P021-8	C06, F29	Light Oil Receiving Pump Tanks	1990 1991	350 gals	None
P021-9	C06, F29	Light Oil Running Tank	1990 1991	15,000 gals	None
P021-10	C06, F29	Light Oil Storage Tank	1990 1991	600,000 gals	None
P021-11	C06, F29	Wash Oil Decanter	1990 1991	20,000 gals	None
P021-12	C06, F29	Wash Oil Circulating Tank	1990 1991	20,000 gals	None
P021-13	C06, F29	Wash Oil Muck Tank	1990 / 1991	20,000 gals	None
P021-14	C06, F29	Fresh Wash Oil Storage Tank	1990 1991	20,000 gals	None
P021-15	C06, F29	Excess Ammonia Liquor Tanks (2)	1991	400,000 gals	None
P021-16	C06, F29	Tar Decanter Tanks (5)	1990 1991 2011 2012	40,000 gals /50,000 gals	None
P021-17	C06, F29	Mother Liquor Tank	1970 1975	20,000 gals	None
P021-18	C06, F29	Flushing Liquor Circulating Tank	1991	20,000 gals	None
P021-19	Stack 15	Sulfuric Acid Plant Tail Gas Stack	1978	50 tons 100% H_2SO_4/day	C15
C15	Stack 15	Tail Gas Scrubber (control device)	2005	7,000 acfm	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
P021-21	F30	Light Oil Loading	1990 1991	4,700,000 gal/yr	None
P021-22	P34	Coal Tar Loading Station	1993	550 gpm / 20,000 gal/hr	None
P024-1	Stack 14	Excess Oven Coke Gas (COG) Flare	1993	460 MMBtu/hr	None
Non-Contact Cooling Tower Group 009					
P021	WSAC	Wet Surface Air Coolers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	CT	Light Oil Cooling Tower	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	CT1-CT5	(5) Cooling Tower	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
Closed System Group 009					
P021-19	None	Desulfurization Boiler [Converts H_2S to Sulfur Dioxide (SO_2)]	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Reaction Chamber	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Deacifiers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Converter	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Drying Tower	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Mist Precipitator	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Acid Coolers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Acid Cooler Sump	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Primary Coolers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	None	Saturators	1978 2013	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	None	Detarrers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Acid Separators	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021-19	None	Rectifier Building	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	None	Benzol Washers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	None	Wash Oil Coolers	1978	Coke Oven Gas @ 80 mmcf/d	Sealed
P021	None	Still Tanks	1978	Coke Oven Gas @ 80 mmcf/d	Sealed

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Emergency Equipment Group 010					
E1	S26	Emergency Diesel Fired Air Compressor	2005	600 hp	None
E5	S6	Standby Diesel Fired Emergency Generator	2004	527 hp	None
E6	E6	Diesel Fired Emergency Generator	2005	30 HP	None
E7	E7	Diesel Fired Emergency Generator	2005	30 HP	None
Miscellaneous Combustion Group 00B					
P026		Indirect Fired Combustion Units Throughout Plant		< 10 MMBtu/hr	

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0090	July 12, 1974
R13-1652	September 2, 1994
R13-1939A	August 19, 2003
R13-2591D	April 18, 2014
R13-2632	September 28, 2005
R13-2772	September 17, 2008
R13-2798	July 13, 2009
R13-2548A	July 28, 2005

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. §61.145, 40 C.F.R. §61.148, and 40 C.F.R. §61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. §61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. §68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. §68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§7- 3.2. (See Section 3.1.10.), 3.3., 3.4., 3.5., 3.6., and 3.7.
[45CSR§7-3.1., 45CSR13, R13-2548, 4.1.4.]

3.1.10. The provisions of Section 3.1.9. [45CSR§7-3.1.] shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2.]

3.1.11. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A.
[45CSR§7-4.1., 45CSR13, R13-2548, 4.1.5.]

3.1.12. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

3.1.13. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1., 45CSR13, R13-2548, 4.1.6.]

3.1.14. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2., 45CSR13, R13-2548, 4.1.7.]

3.1.15. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule (i.e., 45CSR7) may be permitted by the Director for periods not to exceed ten (10) days upon specific

application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1.]

3.1.16. Maintenance operations (as defined in 45CSR7) shall be exempt from the provisions of 45CSR§7-4. provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§7-10.3.]

3.1.17. An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director. The Director may approve an alternative visible emission standard for start-ups and shutdowns to the visible emission standard required under 45CSR§7-3. The petition shall include a demonstration satisfactory to the Director:

a. That it is technologically or economically infeasible to comply with 45CSR§7-3;

b. That establishes the need for approval of a start-up or shutdown plan based upon information including, but not limited to, monitoring results, opacity observations, operating procedures and source inspections.

c. That the particulate matter weight emission standards under section 4 are being met, as determined in accordance with 45CSR7A - "Compliance Test Procedures For 45CSR7 - ' To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations'"; and

d. That during periods of start-ups and shutdowns the owner or operator shall, to the extent practicable, maintain and operate any manufacturing process including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§7-10.4.]

3.1.18. The emissions control program required under Section V.1 and V.2 of Consent Order (CO-SIP-91-29) shall be achieved in accordance with the following schedule:

Action	Schedule (To be Determined)
Initiate engineering design and prepare specifications:	To be determined when plan is approved.
Issue purchase orders for equipment and finalize controls for installation:	To be determined when plan is approved.
Begin construction (or commence control program):	To be determined when plan is approved.
Complete construction and demonstrate compliance:	Within 360 days of receipt of EPA notice of nonattainment determination.

[CO-SIP-91-29, Section V. 3.]

3.1.19. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3., 4. and 5. by testing and /or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60 Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit. Compliance with this requirement is satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on September 28, 2001 and any amendments thereto.
[45CSR§10-8.2.c, Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.1.20. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3., 4. and 5. shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Compliance with this requirement is satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on September 28, 2001, and any amendments thereto.
[45CSR§10-8.3.a, Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.1.21. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken. Compliance with this requirement is satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on September 28, 2001, and any amendments thereto.
[45CSR§10-8.3.b, Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.1.22. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Compliance with this requirement is satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on September 28, 2001, and any amendments thereto.
[45CSR§10-8.3.c, Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.1.23. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule (i.e., 45CSR10) may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§10-9.1., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.1.24. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 parts per million by volume (ppmv) from existing source operations, except as provided in subdivisions of 45CSR§10-4.1.
[45CSR§10-4.1., Batteries #1, #2, #3, and #8, By-Product Plant]

3.1.25. Total Allowable Emission Rates for Similar Units in Priority I and Priority II Regions -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

3.1.e. For Type 'b' and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

[45CSR§10-3.1., Boilers #6, #7, #8, #9 and #10]

3.1.26. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible. Compliance with for the hydrogen sulfide concentration requirement for Boilers #6, #7, #9, and #10 shall be demonstrated through compliance with the more stringent requirement set forth in Sections 5.1.16.(1), and 5.1.17.(1).
[45CSR§10-5.1., Batteries #1, #2, #3, and #8, Boilers #6, #7, #9 and #10]

3.1.27. Any owner or operator of a by-product coke production facility in existence on the effective date of 45CSR10 who can demonstrate to the Director that there is no practical alternative to scheduled maintenance (including shutdown) of desulfurization equipment may request the approval of an enforceable, temporary sulfur dioxide emissions control and mitigation plan for such maintenance period. In order for a plan under this paragraph to be approved the plan must meet the following conditions:

a. Provide that all feasible control measures and process changes will be employed at the coke production facility to reduce emissions of sulfur dioxide (including reduction of coke oven gas generation) during the control system outage.

b. Provide for a definitive reduction in sulfur dioxide emissions by the establishment of unit-specific allowable emission rates for all emissions units of the stationary source sufficient to prevent any violation of federal and state ambient air quality standards or applicable air quality increments for sulfur dioxide.

c. Provide that system down-time and excess sulfur dioxide emissions be reduced to the greatest extent possible by use of increased or contract maintenance personnel, maximized maintenance labor shifts and optimization of available spare parts inventories.

d. Provide for emissions and compliance monitoring as required by the Director in the approved plan during the maintenance periods and for the submission of reports of such monitoring and tests within time-frames specified by the Director in the approved plan. All approved plans shall require that a certified report of excess sulfur dioxide emissions from the by-product coke production facility and offsetting emission units be submitted to the Director within thirty (30) days after the end of the maintenance period.

e. Provide that no maintenance period exceed fourteen (14) days in length nor occur more than twice in any calendar year.

f. Provide at least two weeks notice of all scheduled maintenance periods, the anticipated length of the maintenance period, work to be completed, measures to be taken to minimize the length of desulfurization system down-time and such other information as the Director may specify.

g. Provide for annual review, if necessary, modification or termination of the plan by the Director.

h. Provide that the Director may impose limitations on emission units that are more restrictive than those provided for in the plan as necessary to assure attainment of air quality standards for sulfur dioxide in light of data provided pursuant to 45CSR§10-5.2.f, or any other information available to the Director.

[45CSR§10-5.2., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10]

3.1.28. Compliance with the allowable hydrogen sulfide concentration limitations for combustion sources set forth in 45CSR10 shall be based on a block three (3) hour averaging time.
[45CSR§10-5.4., Batteries #1, #2, #3, and #8, Boilers #6, #7, #9 and #10]

3.1.29. Reserved.

3.1.30. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B found at the end of 45CSR7. Maximum allowable stack gas concentration for sulfuric acid mist is 35 milligrams per dry cubic meter at standard conditions
[45CSR§7-4.2.]

3.1.31. No person shall circumvent the provisions of 45CSR7 by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.
[45CSR§7-4.3.]

3.1.32. Potential Hazardous Material Emissions--Persons responsible for manufacturing process source operations from which hazardous particulate matter material may be emitted such as, but not limited to, lead, arsenic, beryllium and other such materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluations of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Director working in conjunction with other appropriate governmental agencies.
[45CSR§7-4.13.]

3.1.33. The permittee shall continuously maintain a system around this permitted facility to prevent the general public from accessing the facility.
[45CSR13, R13-1939, A.18.]

3.1.34. The permitted facility shall be constructed and operated in accordance with the information filed in Permit Application R13-2591 R13-2591A, R13-2591C, R13-2591D, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2591, 2.5.1.]

3.2. Monitoring Requirements

3.2.1. The permittee shall conduct fugitive particulate emissions monitoring/recordkeeping/reporting as follows. [Not required for open stockpiles, paved and unpaved roads and surfaces and activities regulated by 40 C.F.R. Part 63 Subparts L and CCCCC.]

a. Initially, the Method 22 test shall be performed once per week for fugitive particulate emission activities identified in Section 1.0. If no visible emissions are identified from the Method 22 during four (4) consecutive weeks, the emission checks need only be once per month. If visible emissions are identified from Method 22 at any test, then the permittee shall conduct an additional observation within 72-hours of the Method 22 using 45CSR7A to determine the opacity of the visible emissions being emitted from the fugitive particulate emission activities. Should the 45CSR7A observation indicate compliance, then this observation shall not compromise the Method 22 demonstration and shall be included in the count for four consecutive weeks. The permittee must start over with another four (4) consecutive weeks if visible emissions are detected that do not comply with 45CSR7 before going to monthly monitoring.

b. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or 45CSR7A, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c., and 45CSR§7A-2.1.a.]

3.2.2. The permittee shall conduct monitoring/recordkeeping/reporting for all dust collectors as follows:

a. Initially, the Method 22 test shall be performed once per week. If no visible emissions are identified from the Method 22 during four (4) consecutive weeks, the emission checks need only be once per month. If visible emissions are identified from Method 22 at any test, then the permittee shall conduct an additional observation within 72-hours of the Method 22 using 45CSR7A to determine the opacity of the visible emissions being emitted from the dust collectors. Should the 45CSR7A observation indicate compliance, then this observation shall not compromise the Method 22 demonstration and shall be included in the count for four consecutive weeks. The permittee must start over with another four (4) consecutive weeks if visible emissions are detected that do not comply with 45CSR7 before going to monthly monitoring.

b. Initially, the permittee shall conduct weekly visual emission observations on all dust collectors and the permitee shall maintain instrumentation on all dust collectors for pressure drop observations. The permittee shall maintain records of the maintenance performed on each baghouse. These records shall include all maintenance work performed on each dust collector including the frequency of bag/filter change outs. Records shall state the date and time of each dust collector inspection, the inspection results, and corrective action taken, if any. Records shall be maintained on site for five (5) years from the record creation date.

[45CSR§30-5.1.c.]

3.2.3. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.3.2. Compliance with all total particulate matter mass emission standards under Regulation 2 (45CSR2), Regulation 7 (45CSR7), and CO-SIP-91-29 shall be demonstrated in accordance with test procedures set forth in TP-2 - "Compliance Test Procedures for Regulation 2 - `To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers'", and 45CSR7A (TP-4) - "Compliance Test Procedures for Regulation 7 - `To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations'", except as follows:

a. Particulate mass emission tests for process emission sources subject to Regulation 7 (45CSR7) and CO-SIP-91-29 shall be conducted only in accordance with 40 C.F.R Part 60 Appendix A, Methods 1 through 5 unless alternative procedures or procedural variances are approved by the Director and USEPA.

b. All minor exceptions and variances to the test procedures set forth in TP-2 shall be approved by the Director and all alternative procedures and procedural variances shall be approved by the Director and USEPA.

[CO-SIP-91-29, Section IV. 1.]

3.3.3. Compliance with all PM_{10} mass emission standards under CO-SIP-91-29 shall be demonstrated in accordance with test procedures set forth in 40 C.F.R. Part 51 Appendix M, Methods 201, 201A and 202 or as approved by WV DEP.
[CO-SIP-91-29, Section IV. 2.]

3.3.4. The Company shall submit a test protocol as required by TP-2 and 45CSR7A (TP-4) at least thirty (30) days prior to any test to determine compliance with the provisions of CO-SIP-91-29 or Commission regulations and shall notify the Director of the dates of all such compliance tests at least fifteen (15) days prior to testing.
[CO-SIP-91-29, Section IV. 3.]

3.3.5. Compliance with the visible emissions standards of Regulation 2 (45CSR2) and any visible emission limitations established in CO-SIP-91-29 shall be determined by observers certified in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 and following the observation procedures of Method 9. In determining compliance with the visible emission standards under 45CSR2 and any visible emissions limitations established in CO-SIP-91-29, each visible emission observation shall represent a fifteen (15) second period and visible emission observations shall not be averaged.
[CO-SIP-91-29, Section IV. 4.]

3.3.6. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
[45CSR§10-8.2.b, Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10]

3.3.7. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of 45CSR§10-3., 4. or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 C.F.R. Part 60 Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR§10-8.1.a., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.3.8. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§10-3.
[45CSR§10-8.1.b., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, R13-2548, 4.4.1., R13-2591, 4.4.1., R13-2632, 4.4.1., R13-2772, 4.4.1., R13-2798, 4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. In accordance with the permittee's current 45CSR10 Monitoring Plan, the permittee will maintain sulfur content statements on-site for a period of at least five (5) years in accordance with 45CSR10A, Section 7. The permittee will submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report" on a quarterly basis to the Director by the 30th day of the month following the calendar quarter. The permittee's 45CSR10 Monitoring Plan is attached in Appendix A.
[45CSR§10-8.3., Batteries #1, #2, #3, and #8, Boilers #6, #7, #8, #9 and #10, By-Product Plant]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5. below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478	Associate Director Office of Air Enforcement and Compliance Assistance (3AP20) U. S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address:

R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17. of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. The permittee shall review and determine on a monthly basis if there were any exceedance of the conditions set forth under Section 3.1.33. Should the permittee determine that an exceedance occurred, then the permittee shall submit a written report describing what the exceedance was and what measures the permittee has taken to prevent the exceedance from re-occurring.
[45CSR13, R13-1939, B.1., B.7.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR33	Acid Rain Provisions and Permits do not apply to Mountain State Carbon LLC because it is not considered a Title IV (Acid Rain) Source.
40 C.F.R. Part 60 Subpart Cd	Standards of Performance for Sulfuric Acid Production plants Emissions Guidelines and Compliance times does not apply because Mountain State Carbon LLC does not meet the definition of a sulfuric acid production unit as defined in 40 C.F.R. § 60.81 (a).
40 C.F.R. Part 60 Subpart D	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after August 17, 1971 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 250 mm Btu/hr.
40 C.F.R. Part 60 Subpart Da	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after September 18, 1978 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 250 mm Btu/hr.
40 C.F.R. Part 60 Subpart Db	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after June 19, 1984 does not apply because Mountain State Carbon LLC boilers are less than the applicability size of 100 mm Btu/hr.
40 C.F.R. Part 60 Subpart E	Standards of Performance for Incinerators for which construction is commenced after August 17, 1971 does not apply because Mountain State Carbon LLC does not operate equipment defined as incinerators (under 40 C.F.R. §60.51).
40 C.F.R. Part 60 Subpart H	40 CFR Part 60 NSPS Subpart H Standards of Performance for Sulfuric Acid Production plants does not apply because Mountain State Carbon LLC (MSC) does not meet the definition of a sulfuric acid production unit as defined in 40 C.F.R. § 60.81 (a). MSC is a metallurgical plant that uses the H_2SO_4 plant as a control device to reduce sulfur compound emissions, such as H_2S.

40 C.F.R. Part 60 Subpart K	Standards of Performance for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978 does not apply because Mountain State Carbon LLC has not installed any tanks between these dates with a storage capacity greater than 40,000 gallons.
40 C.F.R. Part 60 Subpart Ka	Standards of Performance for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984 does not apply because Mountain State Carbon LLC has not installed any tanks between these dates.
40 C.F.R. Part 60 Subpart Kb	Standards of Performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984 does not apply because Mountain State Carbon LLC is exempt by paragraph 40 C.F.R. §60.110b(d)(1) [for vessels at coke oven by-product plants].
40 C.F.R. §§60.251 - 60.254 Subpart Y	Standards of Performance for Coal Preparation Plants does not apply because Mountain State Carbon LLC commenced construction or modification of their coal facilities prior to October 24, 1974.
40 C.F.R. Part 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines does not apply because Mountain State Carbon LLC does not operate engines with spark ignitions that were manufactured after July 1, 2008.
40 C.F.R. Part 61 Subpart J	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene is not applicable to sources located in coke by-product plants and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 61 Subpart Y	National Emission Standards for Benzene Emissions from Benzene Storage Vessels is not applied to storage vessels used for storing benzene at a coke by-product facility and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 61 Subpart BB	National Emission Standards for Benzene Emissions from Benzene Transfer Operations is not applicable to benzene-laden liquid from coke by-product recovery plants and therefore does not apply to Mountain State Carbon LLC.
40 C.F.R. Part 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.

40 C.F.R. Part 63 Subpart I	National Emission Standards for Organic Hazardous Air Pollutants related to Equipment Leaks does not apply to Mountain State Carbon LLC because the facility is not considered a part of the Synthetic Organic Chemical Manufacturing Industry.
40 C.F.R. Part 63 Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply to Mountain State Carbon LLC because the facility does not use chromium-based water treatment chemicals.
40 C.F.R. Part 63 Subpart Y	National Emission Standards for Hazardous Air Pollutants for Marine Tank Vessel Loading Operations does not apply to Mountain State Carbon LLC because the vapor pressure of the light oil is less than 1.5 psia at standard conditions of 20 deg. C and 760 mmHg and is therefore exempt from the rule.
40 C.F.R. Part 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) does not apply to Mountain State Carbon LLC because the facility components are subject to another NESHAP (Subparts L, V, and FF) as per 40 C.F.R. §63.2338(c)(1).
40 C.F.R. Part 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing does not apply to Mountain State Carbon LLC since 40 CFR §63.2435(b)(1) is not satisfied. The facility does not produce ammonium sulfate via caprolactam as per 40 C.F.R. §63.2435(b)(1)(iii) nor materials or family of materials listed in 40 C.F.R. §§63.2435(b)(1)(i), (ii), (iv) or (v).
40 C.F.R. Part 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants: Site Remediation does not apply to Mountain State Carbon LLC because the facility received an Administrative Order under Section 3008(h) of the Resource Conservation and Recovery Act from USEPA to perform RCRA corrective Actions.
40 C.F.R. Part 64	The potential PSEU's at the facility are for PM emissions from the coke oven Batteries #1, #2, #3 and #8 pushing and quenching processes. The controls for Batteries #1, #2, and #3 include a Shed, Baghouse, and Quench Baffles. The controls for Battery #8 include a Mobile Hood, a Venturi Scrubber, and two Quench Baffle Towers. The batteries are subject to 40 CFR 63 Subpart L and 40 CFR 63 Subpart CCCCC both of which were proposed after November 11, 1990. Therefore they are exempt pursuant to 40 CFR§64.2(b)(1)(i).
40 C.F.R. Part 68 Subpart A & C	Chemical Action Prevention Provisions do not apply to Mountain State Carbon LLC as none of the regulated materials exist above the threshold limits.
40 C.F.R. Part 72	Acid Rain Program General Provisions does not apply to Mountain State Carbon LLC because it is not considered a Title IV (Acid Rain) Source.

4.0 Source-Specific Requirements [Batteries #1, #2, #3, and #8 (P001, P002, P003, P004), Pushing (P001-05, P004-05) and Quenching (1E, P004-6, P004-7) (Groups 001, 002, 003, and 004) and emission point ID (F13, F14, F15, F16, S1, Stacks 01, 02, 03, 04, 05, 06, 08a, 08b)]

4.1. Limitations and Standards

4.1.1. The permitted facility must be constructed and operated in accordance with information filed in Permit Application No. 90. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to. *(P004)*
[45CSR13, R13-0090]

4.1.2. On and after the date of entry of CO-SIP-91-29 dated November 14, 1991, total particulate matter which includes PM_{10} emissions from all exhaust vent(s) on the baghouse (C01) controlling pushing emissions from Coke Oven Batteries 1, 2 and 3 shall not exceed 2.14 lb/hr.
[CO-SIP-91-29, Section III.3., P001-5]

4.1.3. Total particulate matter and PM_{10} emissions from coke oven battery combustion stacks shall not exceed the following limitations:

Stack ID	Total Particulate in (lb/hr)	PM_{10} in (lb/hr)
No. 1 Battery (Stack 05)	1.40	1.35
No. 2 Battery (Stack 05)	1.40	1.35
No. 3 Battery (Stack 05)	1.58	1.52
No. 8 Battery (Stack 06)	6.93	6.65

[CO-SIP-91-29, Section III.4.A.]

4.1.4. Compliance with the emission limitations of Section 4.1.3. [Section III.4.A.] shall be achieved on and after November 14, 1991.
[CO-SIP-91-29, Section III.4.B.]

4.1.5. Except as provided in 40 C.F.R. §§63.304(b)(4), and (b)(5) and in 40 C.F.R. §63.305, on and after the dates specified below, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from a by-product coke oven battery (Batteries 1, 2, 3, and 8) that exceed any of the following emission limitations:

(2) On and after January 1, 1998;

(ii) 0.4 percent leaking topside port lids, as determined by the procedures in Section 4.3.3.(1) [40 C.F.R. §63.309(d)(1)];

(iii) 2.5 percent leaking offtake system(s), as determined by the procedures in Section 4.3.3.(1) [40 C.F.R. §63.309(d)(1)]; and

(iv) 12 seconds of visible emissions per charge, as determined by the procedures in Section 4.3.3.(2) [40 C.F.R. §63.309(d)(2)].

(3) On and after January 1, 2010, unless the Administrator promulgates more stringent limits pursuant to section 112(i)(8)(C) of the Clean Air Act;

(i) 4.0 percent leaking coke oven doors on each tall by-product coke oven battery (No. 8 Battery) and for each by-product coke oven battery owned or operated by a foundry coke producer, as determined by the procedures in Section 4.3.3.(1) [40 C.F.R. §63.309(d)(1)]; and

(ii) 3.3 percent leaking coke oven doors for each by-product coke oven battery (Nos. 1, 2, and 3 Batteries) not subject to the emission limitation in Section 4.1.5.(3)(i) [40 C.F.R. §63.304(b)(3)(i)], as determined by the procedures in Section 4.3.3.(1) [40 C.F.R. §63.309(d)(1)].

[45CSR34, 40 C.F.R. §63.304(b)]

4.1.6. *Work practice plan*. On or before November 15, 1993, each owner or operator shall prepare and submit a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations under this subpart, or, for a coke oven battery not subject to visible emission limitations under this subpart, other federally enforceable visible emission limitations for these emission points. The permittee shall implement the submitted work practice plan to achieve compliance with the applicable visible emission limitations.

(2) The initial plan and any revisions shall be submitted to the Administrator or the delegated State, local, or Tribal authority. The Administrator may require revisions to the initial plan only where the Administrator finds either that the plan does not address each subject area listed in Section 4.1.7. [40 C.F.R. §63.306(b)] for each emission point subject to a visible emission standard under 40 C.F.R. Part 63 Subpart L, or that the plan is unenforceable because it contains requirements that are unclear.

(3) During any period of time that an owner or operator is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any recordkeeping requirement(s) under Section 4.4.1.(4) [40 C.F.R. §63.311(f)(4)] for the emission point during a particular day is a single violation.

[45CSR34, 40 C.F.R. §63.306(a)]

4.1.7. *Plan components*. The owner or operator shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under 40 C.F.R. Part 63 Subpart L. Each of the following provisions, at a minimum, shall be addressed in the plan:

(1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of 40 C.F.R. Part 63 Subpart L, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by the owner or operator or by qualified contractor personnel; however, the owner or operator shall ensure that the contractor training program complies with the requirements of 40 C.F.R. §63.306(b). The training program in the plan must include:

(i) A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;

(ii) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;

(iii) A description of the training method(s) that will be used (e.g., lecture, video tape);

(iv) A statement of the duration of initial training and the duration and frequency of refresher training;

(v) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and

(vi) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing Section 4.1.7.(7) [40 C.F.R. §63.306(b)(7)].

(2) Procedures for controlling emissions from coke oven doors on by-product coke oven batteries, including:

(i) A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;

(iii) Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

(iv) For batteries equipped with self-sealing doors, procedures for use of supplemental gasketing and luting materials, if the owner or operator elects to use such procedures as part of the program to prevent exceedances;

(v) For batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary to prevent exceedances;

(vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and

(vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur.

(3) Procedures for controlling emissions from charging operations on by-product coke oven batteries, including:

(i) Procedures for equipment inspection, including the frequency of inspections, and replacement or

repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for ensuring that the larry car hoppers are filled properly with coal;

(iii) Procedures for the alignment of the larry car over the oven to be charged;

(iv) Procedures for filling the oven (e.g., procedures for staged or sequential charging);

(v) Procedures for ensuring that the coal is leveled properly in the oven; and

(vi) Procedures and schedules for inspection and cleaning of offtake systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.

(4) Procedures for controlling emissions from topside port lids on by-product coke oven batteries, including:

(i) Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and

(ii) Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.

(5) Procedures for controlling emissions from offtake system(s) on by-product coke oven batteries, including:

(i) Procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and

(iii) Procedures for dampering off ovens prior to a push.

(7) Procedures for maintaining, for each emission point subject to visible emission limitations under 40 C.F.R. Part 63 Subpart L, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:

(i) Procedures for recording the performance of such plan requirements; and

(ii) Procedures for certifying the accuracy of such records by the owner or operator.

(8) Any additional work practices or requirements specified by the Administrator according to Section 4.1.9. [40 C.F.R. §63.306(d)].

[45CSR34, 40 C.F.R. §63.306(b)]

4.1.8. *Implementation of work practice plans.* On and after November 15, 1993, the owner or operator of a coke oven battery shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:

(1) The owner or operator of a coke oven battery subject to visible emission limitations under 40 C.F.R. Part 63 Subpart L on and after November 15, 1993, shall:

(i) Implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purpose of Section 4.1.8.(1)(i) [40 C.F.R. §63.306(c)(1)(i)], the second exceedance is "independent" if either of the following criteria is met:

(A) The second exceedance occurs 30 days or more after the first exceedance;

(B) In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or

(C) In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in 40 C.F.R. Part 63 Appendix A by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.

(ii) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to Section 4.1.8.(1)(i) [40 C.F.R. §63.306(c)(1)(i)]. After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination under Section 4.1.8.(1)(i) [40 C.F.R. §63.306(c)(1)(i)].

[45CSR34, 40 C.F.R. §63.306(c)]

4.1.9. *Revisions to plan.* Revisions to the work practice emission control plan will be governed by the provisions in this Section 4.1.9. and Section 4.1.6.(2) [40 C.F.R. §63.306(d) and (a)(2)].

(1) The Administrator may request the owner or operator to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6-month period that starts 30 days after the owner or operator is required to implement work practices under Section 4.1.8. [40 C.F.R. §63.306(c)]. In the case of a coke oven battery subject to visual emission limitations under 40 C.F.R. Part 63 Subpart L, the second exceedance must be independent under the criteria in Section 4.1.8.(1)(i) [40 C.F.R. §63.306(c)(1)(i)].

(2) The Administrator may not request the owner or operator to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the Administrator disapproves the plan according to the provisions in Section 4.1.9.(6) [40 C.F.R. §63.306(d)(6)].

(3) If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the owner or operator. No later than 10 days after receipt of such a notification, the owner or operator shall notify the Administrator of any finding of whether work practices are related to the cause or the solution of the problem. This notification is subject to review by the Administrator according to the provisions in Section 4.1.9.(6) [40 C.F.R. §63.306(d)(6)].

(4) The owner or operator shall submit a revised work practice plan within 60 days of notification from the Administrator under Section 4.1.9.(1) [40 C.F.R. §63.306(d)(1)], unless the Administrator grants an extension of time to submit the revised plan.

(5) If the Administrator requires a plan revision, the Administrator may require the plan to address a subject area or areas in addition to those in Section 4.1.9. [40 C.F.R. §63.306(d)], if the Administrator determines that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.

(6) The Administrator may disapprove a plan revision required under in Section 4.1.9. [40 C.F.R. §63.306(d)] if the Administrator determines that the revised plan is inadequate to prevent exceedances of the visible emission limitation under 40 C.F.R. Part 63 Subpart L for the emission point for which a plan revision is required or, in the case of a battery not subject to visual emission limitations under 40 C.F.R. Part 63 Subpart L, other federally enforceable emission limitations for such emission point. The Administrator may also disapprove the finding that may be submitted pursuant to in Section 4.1.9.(3) [40 C.F.R. §63.306(d)(3)] if the Administrator determines that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

[45CSR34, 40 C.F.R. §63.306(d)]

4.1.10. Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system
[45CSR34, 40 C.F.R. §63.307(a)(2)]

4.1.11. Each flare (P008-1, P008-2, P008-3 and P008-4) installed pursuant to this section shall meet the following requirements:

(1) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air-assisted, or a net value of 7.45. MJ/scm (200 Btu/scf) if the flare is non-assisted.

(2) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of Section 4.1.11(4) [40 C.F.R. §63.307(b)(4)].

(4) Each flare installed to meet the requirements of Section 4.1.11. [40 C.F.R. §63.307(b)] that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by Section 4.3.6.(2) [40 C.F.R. §63.309(h)(2)].

[45CSR34, 40 C.F.R. §63.307(b)]

4.1.12. Each flare installed to meet the requirements of Section 4.1.10. to 4.1.13. [40 C.F.R. §63.307] shall be operated with no visible emissions, as determined by the methods specified in Section 4.3.6.(1) [40 C.F.R. §63.309(h)(1)], except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
[45CSR34, 40 C.F.R. §63.307(c)]

4.1.13. Any emissions resulting from the installation of flares shall not be used in making new source review determinations under part C and part D of title I of the Clean Air Act.
[45CSR34, 40 C.F.R. §63.307(f)]

4.1.14. On and after November 15, 1993, the owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303 in appendix A to 40 C.F.R Part 63.
[45CSR34, 40 C.F.R. §63.308(a)]

4.1.15. The owner or operator shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.
[45CSR34, 40 C.F.R. §63.308(b)]

4.1.16. The owner or operator shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.
[45CSR34, 40 C.F.R. §63.308(c)]

4.1.17. The owner or operator shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the Administrator.
[45CSR34, 40 C.F.R. §63.308(d)]

4.1.18. At all times including periods of startup, shutdown, and malfunction, the owner or operator shall operate and maintain the coke oven battery and its pollution control equipment required under 40 C.F.R. Part 63 Subpart L, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 C.F.R. Part 63 Subpart L. Failure to adhere to the requirement of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.
[45CSR34, 40 C.F.R. §63.310(a)]

4.1.19. Each owner or operator of a coke oven battery shall develop and implement according to Section 4.1.20. [40 C.F.R. §63.310(c)], a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.
[45CSR34, 40 C.F.R. §63.310(b)]

4.1.20. Malfunctions shall be corrected as soon as practicable after their occurrence.
[45CSR34, 40 C.F.R. §63.310(c)]

4.1.21. In order for the provisions of Section 4.1.26. [40 C.F.R. §63.310(i)] to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:

(1) If practicable, to the certified observer if the observer is at the facility during the occurrence; or

(2) To the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification under Section 4.1.21(1) [40 C.F.R. §63.310(d)(1)] was not made, an explanation of why no such notification was made.

[45CSR34, 40 C.F.R. §63.310(d)]

4.1.22. Within 14 days of the notification made under Section 4.1.21. [40 C.F.R. §63.310(d)], or after a startup or shutdown, the owner or operator shall submit a written report to the applicable permitting authority that:

(1) Describes the time and circumstances of the startup, shutdown, or malfunction; and

(2) Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.

[45CSR34, 40 C.F.R. §63.310(e)]

4.1.23. The owner or operator shall maintain a record of internal reports which form the basis of each malfunction notification under Section 4.1.21. [40 C.F.R. §63.310(d)].
[45CSR34, 40 C.F.R. §63.310(f)]

4.1.24. To satisfy the requirements of Section 4.1.18. to 4.1.26. [40 C.F.R. §63.310] to develop a startup, shutdown, and malfunction plan, the owner or operator may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for Section 4.1.18. to 4.1.26. [40 C.F.R. §63.310] and is made available for inspection at reasonable times when requested by the Administrator.
[45CSR34, 40 C.F.R. §63.310(g)]

4.1.25. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(1) Does not address a startup, shutdown, or malfunction event that has occurred;

(2) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or

(3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

[45CSR34, 40 C.F.R. §63.310(h)]

4.1.26. If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:

(1) Constitute a violation of relevant requirements of 40 C.F.R. Part 63 Subpart L;

(2) Be used in any compliance determination under Section 4.3.1. through 4.3.7. [40 C.F.R. §63.309]; or

(3) Be considered for purposes of Section 4.1.6. through 4.1.9. [40 C.F.R. §63.306], until the Administrator has resolved the claim that a startup, shutdown, or malfunction has occurred. If the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of Section 4.1.6. through 4.1.9. [40 C.F.R. §63.306], regardless of whether the owner or operator further contests such determination. The owner's or operator's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under Section 4.1.6. through 4.1.9. [40 C.F.R. §63.306], as written notification from the certified observer that an exceedance has occurred.

[45CSR34, 40 C.F.R. §63.310(i)]

4.1.27. The owner or operator shall comply with all applicable State implementation plan emission limits and (subject to any expiration date) all federally enforceable emission limitations which are contained in an order, decree, permit, or settlement agreement for the control of emissions from offtake systems, topside port lids, coke oven doors, and charging operations in effect on September 15, 1992.
[45CSR34, 40 C.F.R. §63.312(a)]

4.1.28. Nothing in 40 C.F.R. Part 63 Subpart L shall affect the enforcement of such State implementation plan emission limitations (or, subject to any expiration date, such federally enforceable emission limitations contained in an order, decree, permit, or settlement agreement) in effect on September 15, 1992.
[45CSR34, 40 C.F.R. §63.312(b)]

4.1.29. Except as specified in Section 4.1.13. [40 C.F.R. §63.307(f)], nothing in 40 C.F.R. Part 63 Subpart L shall limit or affect any authority or obligation of Federal, State, or local agencies to establish emission limitations or other requirements more stringent than those specified in 40 C.F.R. Part 63 Subpart L.
[45CSR34, 40 C.F.R. §63.312(d)]

4.1.30. Except as provided in §63.302(c), section 112(g) of the Clean Act shall not apply to sources subject to 40 C.F.R. Part 63 Subpart L.
[45CSR34, 40 C.F.R. §63.312(e)]

4.1.31. (1) Existing By-Product Coke Production Facility(Batteries 1, 2, 3) -- No person shall cause, suffer, allow or permit the emission of smoke and/or particulate matter into the open air in excess of the following provisions from the operation of a by-product coke production facility in production on the effective date of 45CSR7 or a by-product coke production facility which is constructed as a replacement for a by-product coke production facility which shut down not more than three (3) years prior to the effective date of 45CSR7:

a. Charging emissions from charging of any four consecutive ovens shall not exceed an aggregate time of more than one hundred (100) seconds.

b. Pushing emissions from pushing shall be vented into air pollution control equipment. Particulate matter emissions discharged from this air pollution control equipment shall not exceed a mass particulate rate as determined by the following formula:

$$E=C^{.09}$$

Where E = particulate matter emissions rate in pounds per push and C = actual charge of coal in tons per oven.

1. The smoke and/or particulate matter emissions discharged from this air pollution control equipment and noncaptured pushing emissions shall not exceed twenty percent (20%) opacity.

c. Transport emissions from an open quench car shall not exceed ten percent (10%) opacity.

d. Coke side sheds and similar structures used to capture pushing emissions shall be designed and operated so as to prevent the escape of smoke and/or particulate matter from points other than the stack of the air pollution control equipment.

e. Coke oven topside emissions shall not exceed the following:

1. No more than two percent (2%) of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

2. No more than ten percent (10%) of the off-take piping shall have smoke and/or particulate matter emissions.

3. No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point except as provided by Sections 4.1.31.(1)e.1. or 4.1.31.(1)e.2. [45CSR§§7-3.3.e.1. or 7-3.3.e.2.].

f. No more than ten percent (10%) of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged.

g. Quench towers shall employ as a minimum good baffle design with make-up water from the receiving stream, except that the blowdown from scrubbers of a pushing emission control system, dedicated to a specific battery, may be used as make-up water for the quench tower of that battery. The makeup water administered in the quenching process (quench tower 1E) shall have a total dissolved solids concentration less than 800 milligrams per liter and total suspended solids concentration of less than 200 milligrams per liter. For batteries which this section applies the receiving stream shall be the Ohio River.
[45CSR§7.3.3.g., 45CSR13, R13-2772, 4.1.4.b.]

h. Smoke and/or particulate matter emissions from combustion stacks shall meet the requirements of Sections 3.1.9. and 3.1.10. [45CSR§§7-.3.1. and 7- 3.2.] and shall not exceed a concentration of 0.040 grains per dry standard cubic foot.

i. Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal and/or coke.

[45CSR§7-3.3.]

(2) New By-Product Coke Production Facility--No person shall cause, suffer, allow or permit the emission of smoke and/or particulate matter into the open air in excess of the following provisions from the operation of a new by-product coke production facility, other than a replacement by-product coke production facility that is constructed as per the provisions of subsection 3.3, that begins production after July 1, 1970:

a. Charging emissions from the charging of any four (4) consecutive ovens shall not exceed an aggregate time of more than sixty (60) seconds.

b. Pushing emissions from pushing shall be vented into air pollution control equipment. The particulate matter emissions discharged from this air pollution control equipment shall not exceed a mass emission rate of 0.04 lb/ton of coal charged. The smoke and/or particulate matter emissions discharged from this air pollution control equipment and non-captured pushing emissions shall not exceed twenty percent (20%) opacity.

c. Transport emissions from an enclosed quench car shall not exceed twenty percent (20%) opacity. Transport emissions from an open quench car shall not exceed ten percent (10%) opacity.

d. Coke side sheds and similar structures used to capture pushing and/or quenching emissions shall be designed and operated so as to prevent the escape of smoke and/or particulate matter emissions from points other than the stack of the air pollution control equipment.

e. Coke oven topside emissions shall not exceed the following:

1. No more than two percent (2%) of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

2. No more than five percent (5%) of the offtake piping shall have smoke and/or particulate matter emissions.

3 No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point, except as provided by 4.1.31.(2)e.1. or 4.1.31.(2)e.2. [45CSR§§7-3.4.e.1. or 7-3.4.e.2.].

f. No more than eight percent (8%) of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged. Any battery affected by 45CSR§7-3.4 shall be constructed in a manner that will allow for the retrofitting of the battery with hooding to capture door emissions and air pollution control equipment designed to at least a ninety percent (90%) particulate control efficiency.

g. Quench towers shall employ, as a minimum, multiple row baffles and use make-up water with a concentration less than eight hundred (800) milligrams per liter of total dissolved solids and a concentration of less than one hundred (100) milligrams per liter of total suspended solids.
[45 CSR§76-3.4g, 45CSR13, R13-2591, 4.1.11.c.]

h. Smoke and/or particulate matter emissions from combustion stacks shall meet the requirements of 45CSR§§7-3.1 and 3.2 and shall not exceed a grain loading of 0.025 grains per dry standard cubic foot.

i. Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal/coke.

[45CSR§7-3.4]

4.1.32. Sulfur dioxide emissions from pushing at Coke Oven Batteries #1, #2 and #3 shall not exceed 10.48 pounds per hour.
[45CSR13, R13-1939, A.23., B.1.]

4.1.33. Sulfur dioxide emissions from pushing at Coke Oven Battery #8 shall not exceed 15.72 pounds per hour.
[45CSR13, R13-1939, A.24., B.1.]

4.1.34. Compliance with the allowable emission limits stated in Sections 4.1.32. and 4.1.33. shall be calculated using an emission factor of 0.1078 pounds per tons of coal charged and multiplied by the hourly average tons of coal charged to the batteries each month.
[45CSR13, R13-1939, A.25., B.1.]

4.1.35. The permitted pushing, quenching, and battery stacks operations (Batteries 1, 2, 3, and 8) shall comply with the following applicable requirements of 40 C.F.R. Part 63 Subpart CCCCC - *National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks*, with the exception of any more stringent limitations set forth in this permit.

4.1.35.1. 40 C.F.R. §63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in 40 C.F.R. §63.7290(a)(1) through (2):

(1) 0.01 grain per dry standard cubic foot (gr/dscf) if a cokeside shed is used to capture emissions *(C01 only);*

(2) 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions *(C02 only)*;

(b) You must meet each operating limit in 40 C.F.R. §63.7290(b)(1) and (3) that applies to you for a new or existing coke oven battery.

(1) For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test [*See "Note" in 4.1.35.8. for values*]. *(C02 only).*

(3) For each capture system applied to pushing emissions, you must maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test; or

(i) For each capture system that uses an electric motor to drive the fan, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test [*See "Note" in 4.1.35.8. for values*].

4.1.35.2. 40 C.F.R. §63.7291 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with vertical flues?

(a) You must meet each requirement in 40 C.F.R. §63.7291(a)(1) through (7) for each new or existing by-product coke oven battery with vertical flues (Batteries 1, 2, 3, and 8).

(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in 40 C.F.R. §63.7334(a), and you must document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in 40 C.F.R. §63.7334(a).

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

(5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery (i.e., < 5m, Batteries 1, 2, 3) or 35 percent opacity for any tall battery (i.e., ≥5m, Battery 8), you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of this section, whichever is greater:

$$\mathbf{X = 0.55 * Y} \quad \text{(Eq. 1)}$$

Where:

X = Number of calendar days allowed to complete corrective action or increase coking time; and
Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction

produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

(6) (i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in 40 C.F.R. §63.7291(a)(5), observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in 40 C.F.R. §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in 40 C.F.R. §63.7291(a)(1). If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in 40 C.F.R. §63.7291(a)(5).

(ii) After implementing any additional corrective action and/or increased coking time required under 40 C.F.R. §63.7291(a)(6)(i) or (a)(7)(ii), you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in 40 C.F.R. §63.7291(a)(5), you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in 40 C.F.R. §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in 40 C.F.R. §63.7291(a)(1). If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must follow the procedures in 40 C.F.R. §63.7291(a)(6)(iii).

(iii) If the corrective action and/or increased coking time was unsuccessful as described in 40 C.F.R. §63.7291(a)(6)(ii), you must repeat the procedures in 40 C.F.R. §63.7291(a)(6)(ii) until the corrective action and/or increased coking time is successful. You must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under 40 C.F.R. §63.7291(a)(6)(ii).

(7) (i) If at any time you place an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, you must keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in 40 C.F.R. §63.7291(a)(7)(ii) or (a)(7)(iii).

(ii) To qualify for a decreased coking time for an oven placed on increased coking time in accordance with 40 C.F.R. §63.7291(a)(5) or (6), you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in 40 C.F.R. §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to

the 90-day reading rotation described in 40 C.F.R. §63.7291(a)(1). If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in 40 C.F.R. §63.7291(a)(6)(ii) to confirm that the corrective action(s) and/or increased coking time was successful.

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in 40 C.F.R. §63.7291(a)(7)(ii), you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in 40 C.F.R. §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in 40 C.F.R. §63.7291(a)(1). If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in 40 C.F.R. §63.7291(a)(6)(ii) to confirm that the corrective action(s) and/or increased coking time was successful.

(iv) You must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in 40 C.F.R. §63.7291(a)(7)(iii).

(b) As provided in 40 C.F.R. §63.6(g), you may request to use an alternative to the work practice standards in 40 C.F.R. §63.7291(a).

4.1.35.3. 40 C.F.R. §63.7294 What work practice standard must I meet for soaking?

(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

(1) Train topside workers to identify soaking emissions that require corrective actions.

(2) Damper the oven off the collecting main prior to opening the standpipe cap.

(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to,

reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.

(b) As provided in 40 C.F.R. §63.6(g), you may request to use an alternative to the work practice standard in 40 C.F.R. §63.7294(a).

4.1.35.4. 40 C.F.R. §63.7295 What requirements must I meet for quenching?

(a) You must meet the requirements in 40 C.F.R. §§63.7295(a)(1) and (2) for each quench tower and backup quench station at a new or existing coke oven battery.

(1) For the quenching of hot coke, you must meet the requirements in 40 C.F.R. **§6**3.7295(a)(1)(i) or (ii).

(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or
[45CSR13, R13-2772, 4.1.4.c]

(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority. (*Note: The facility opts to utilize the concentration of TDS above.*)

(2) You must use acceptable makeup water, as defined in 40 C.F.R. §63.7352, as makeup water for quenching.

The facility shall provide makeup water from MACT acceptable sources as defined by 40 C.F.R. §63.7352. *Acceptable makeup water* means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 C.F.R. Part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.
[45CSR34, 40 C.F.R. §63.7295(a)(2), 45CSR13, R13-2772, 4.1.4.a., R13-2591 4.1.11.b.]

(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must meet each of the requirements in 40 C.F.R. §§63.7295(b)(1) through (4).

(1) You must equip and maintain each quench tower with baffles (Mist Suppressor Panels) such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.
[45CSR13, R13-2772, 4.1.4.d]

(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in 40 C.F.R. §§63.7295(b)(2)(i) and (ii).

(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

[45CSR13, R13-2772, 4.1.4.e]

(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

(c) As provided in 40 C.F.R. §63.6(g), you may request to use an alternative to the work practice standards in 40 C.F.R. §63.7295(b).

4.1.35.5. 40 C.F.R. §63.7296 What emission limitations must I meet for battery stacks?

You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in 40 C.F.R. §63.7296(a) and (b).

(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.

(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

4.1.35.6. 40 C.F.R. §63.7300 What are my operation and maintenance requirements?

(a) As required by 40 C.F.R. §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 C.F.R. Part 63 Subpart CCCCC.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in 40 C.F.R. §63.7300(b)(1) through (6).

(1) Frequency and method of recording underfiring gas parameters.

(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.

(3) Procedures to prevent pushing an oven before it is fully coked.

(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.

(5) Frequency and procedures for inspecting flues, burners, and nozzles.

(6) Schedule and procedures for the daily washing of baffles.

(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in 40 C.F.R. §63.7300(c)(1) through (3).

(1) Monthly inspections of the equipment that are important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), you must complete repairs within 30 days after the date that the defect or deficiency is discovered. If you determine that the repairs cannot be completed within 30 days, you must submit a written request for an extension of time to complete the repairs that must be received by the permitting authority not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the permitting authority notifies you that it objects to the request. The permitting authority may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the permitting authority may request modifications to the proposed schedule as part of the approval process.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

4.1.35.7. 40 C.F.R. §63.7310 What are my general requirements for complying with 40 C.F.R. Part 63 Subpart CCCCC?

(a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 40 C.F.R. §63.2.

(b) During the period between the compliance date specified for your affected source in 40 C.F.R. §63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in 40 C.F.R. §63.6(e)(3).

4.1.35.8. 40 C.F.R. §63.7323 What procedures must I use to establish operating limits?

(a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in 40 C.F.R. §63.7323(a)(1) and (2) *(C02 only)*.

(1) Using the continuous parameter monitoring systems (CPMS) required in 40 C.F.R. §63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit according to the procedures in 40 C.F.R. §63.7323(c)(1), (2), or (3) *(C01 only)*.

(1) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3) for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. Your operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

(2) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test

run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

(3) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(ii) for static pressure or fan RPM, measure and record the static pressure at the inlet of the control device or fan RPM during each push sampled for each particulate matter test run. Your operating limit for static pressure is the minimum vacuum recorded during any of the three runs that meets the emission limit. Your operating limit for fan RPM is the lowest fan RPM recorded during any of the three runs that meets the emission limit.

(e) You may change the operating limit for a venturi scrubber, capture system, or mobile control device that captures emissions during pushing if you meet the requirements in 40 C.F.R. §63.7323(e)(1) through (3).

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in 40 C.F.R. §63.7290(a).

(3) Establish revised operating limits according to the applicable procedures in 40 C.F.R. §63.7323(a) and (c).

Note: Based on the test conducted December 2014: fan motor amperage is 158, pressure drop is 18 inches of water, and water flow is 837 gallons per minute.

[45CSR13, R13-2591, 4.1.10., 45CSR34, 40 C.F.R. Part 63 Subpart CCCCC]

4.1.36. The following operating limits and conditions are specific to the operation of the South Quench Tower (Source P004-6) and the backup North Quench Tower (Source P004-7) employed by Battery No. 8:

(1) Coke product from Battery No. 8 shall be charged to the South Quench Tower or the backup North Quench Tower. Coke product shall never be charged to both quench towers simultaneously.

(2) Reserved.

(3) Reserved

(4) Product charged to the quench towers shall not exceed a maximum hourly rate of 175 tons per hour, or a total combined maximum annual rate of 1,238,376 tons per year.

(5) The total combined emissions vented though Emission Point Stack 08a and Stack 08b shall be limited to the pollutants and associated emission rates shown in the following table:

Pollutant	Emissions Limits [2]	
	Hourly (lbs/hr)	Annual[1] (tons/yr)
PM	94.5	334.4
PM_{10}	9.3	32.8

Benzo(a)Pyrene	0.03	0.1
Naphthalene	0.03	0.1
Benzene	0.02	0.05
Lead	0.01	0.003

1- Annual emissions are based on a maximum permitted throughput of 1,238,376 tons per year.
2- All emission rates based on AP-42 emission standards.

[45CSR13, R13-2591, 4.1.11.]

4.1.37. Compliance with all annual limits set forth in Section 4.1.38. shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the measured operating parameter at any given time during the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2772, 4.1.3.]

4.1.38. The total combined emissions vented though Emission Point 1E shall be limited to the pollutants and associated emission rates shown in the following Table 4.1.1.:

Table 4.1.1.

Pollutant	**Emissions Limits**	
	Hourly (lbs/hr)	**Annual** (tons/yr)
PM	36.8	161.0
PM10	3.6	15.8
$PM_{2.5}$	2.2	9.8
Lead	0.0004	0.002

1- All PM emission rates based on AP-42 Emission Factors (Table 12.2-12, 5/2008).

[45CSR13, R13-2772, 4.1.1.]

4.1.39. Compliance with the emission limitations of 4.1.38. shall be met by limiting the combined amount of coal charged into Batteries 1, 2, and 3 to 97.2. tons per hour and 851,000 tons per year.
[45CSR13, R13-2772, 4.1.2., (1E)]

4.1.40. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the quench tower baffles for Batteries 1, 2, and 3 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2772, 4.1.5., (1E)]

4.1.41. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2772 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2772, 2.5.1., (1E)]

4.2. Monitoring Requirements

4.2.1. See Section 3.2

4.2.2. For the purpose of determining compliance with the baffle washing requirements set forth in Section 4.1.35.4., the baffles must be washed once each day that the tower is employed in the coke quenching operation, except during periods when the ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). During days that the baffles are not washed, the permittee shall conduct continuous monitoring of the ambient temperature.
[45CSR13, R13-2591, 4.2.4.]

4.2.3. For the purpose of determining compliance with the throughput limits set forth in Section 4.1.36.(4), the permittee shall monitor the maximum averaged hourly and total annual coke product through the quench towers.
[45CSR13, R13-2591, 4.2.5.]

4.2.4. The permitted pushing, quenching, and battery stacks operations (Batteries 1, 2, 3 and 8) shall comply with the following monitoring requirements of 40 C.F.R. Part 63 Subpart CCCCC - *National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks*, with the exception of any more stringent limitations set forth in this permit.

1. 40 C.F.R. §63.7330 What are my monitoring requirements?

(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in 40 C.F.R. §63.7331(a) and conduct inspections at their specified frequency according to the requirements in 40 C.F.R. §§63.7330(a)(1) through (8). *(C01 only).*

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;

(3) Check the compressed air supply for pulse-jet baghouses each day;

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in 40 C.F.R. §63.7331(e) *(C02 only)*.

(d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate according to the requirements in 40 C.F.R. §63.7331(g), the fan motor amperes according to the requirements in 40 C.F.R. §63.7331(h), or the static pressure or the fan RPM according to the requirements in 40 C.F.R. §63.7331(i).

(e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS according to the requirements in 40 C.F.R. §63.7331(j).

2. 40 C.F.R. §63.7331 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak detection system according to the requirements in 40 C.F.R. §63.7331(a)(1) through (7) *(C01 only)*.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

(2) The system must provide output of relative changes in particulate matter loadings;

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(b) For each CPMS required in 40 C.F.R. §63.7330, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in 40 C.F.R. §63.7331(b)(1) through (6) *(C02 only)*.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 C.F.R. §§63.8(c)(1), (3), (4)(ii), (7), and (8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. §63.8(d); and

(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of 40 C.F.R. §§63.10(c), (e)(1), and (e)(2)(i).

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan *(C02 only)*.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan *(C02 only)*.

(e) For each venturi scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across the scrubber and scrubber water flow rate during each push according to the requirements in 40 C.F.R. §§63.7331(b) through (d) except as specified in 40 C.F.R. §63.7331(e)(1) through (3) *(C02 only)*.

(1) Each CPMS must complete a measurement at least once per push;

(2) Each CPMS must produce valid data for all pushes; and

(3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.

(g) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device.

(h) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the fan motor amperes.

(i) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM.

(j) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in 40 C.F.R. §63.7331(j)(1) through (5).

(1) You must install, operate, and maintain each COMS according to the requirements in 40 C.F.R. §63.8(e) and Performance Specification 1 in 40 C.F.R. Part 60 Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

(2) You must conduct a performance evaluation of each COMS according to the requirements in 40 C.F.R. §63.8 and Performance Specification 1 in appendix B to 40 C.F.R. Part 60;

(3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in 40 C.F.R. §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;

(4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. You must reduce the COMS data as specified in 40 C.F.R. §63.8(g)(2).

(5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in 40 C.F.R. §63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

3. 40 C.F.R §63.7332 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times the affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

4. 40 C.F.R. §63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) For each control device applied to pushing emissions and subject to the emission limit in 40 C.F.R. §63.7290(a), you must demonstrate continuous compliance by meeting the requirements in 40 C.F.R. §§63.7333(a)(1) and (2):

(1) Maintaining emissions of particulate matter at or below the applicable limits in 40 C.F.R. §§63.7290(a)(1) through (4); and

(2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in 40 C.F.R. §63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in 40 C.F.R. §63.7333(b)(1) through (3) *(C02 only).*

(1) Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test. [*See "Note" in 4.1.35.8. for values*]

(2) Operating and maintaining each CPMS according to 40 C.F.R. §63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to 40 C.F.R. §63.7331(e)(1) through (3).

(d) For each capture system applied to pushing emissions and subject to the operating limit in 40 C.F.R. §63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in 40 C.F.R. §63.7333(d)(1), (2), or (3):

(*Note: The facility has opted to meet the requirements of 40 C.F.R. §63.7333(d)(2*).

(1) If you elect the operating limit for volumetric flow rate in 40 C.F.R. §63.7290(b)(3):

(i) Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(2) If you elect the operating limit for fan motor amperes in 40 C.F.R. §63.7290(b)(3)(i):

(i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(3) If you elect the operating limit for static pressure or fan RPM in 40 C.F.R. §63.7290(b)(3)(ii):

(i) Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure at the inlet to the control device is at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(e) Beginning on the first day compliance is required under 40 C.F.R. §63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in 40 C.F.R. §63.7296(a) by meeting the requirements in 40 C.F.R. §63.7333(e)(1) and (2):

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to 40 C.F.R. §63.7331(j).

(f) Beginning on the first day compliance is required under 40 C.F.R. §63.7283, you must demonstrate continuous compliance with the TDS limit for quenching in 40 C.F.R. §63.7295(a)(1)(i) by meeting the requirements in 40 C.F.R. §63.7333(f)(1) and (2):

(1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and

(2) Determining the TDS content of the quench water at least weekly according to the requirements in 40 C.F.R. §63.7325(a) and recording the sample results.

(g) Beginning on the first day compliance is required under 40 C.F.R. §63.7283, you must demonstrate continuous compliance with the constituent limit for quenching in 40 C.F.R. §63.7295(a)(1)(ii) by meeting the requirements in 40 C.F.R. §63.7333(g)(1) and (2):

(*Note: The facility opts to utilize the concentration of TDS above.*)

(1) Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and

(2) Determining the sum of the constituent concentrations at least monthly according to the requirements in 40 C.F.R. §63.7325(c) and recording the sample results.

[45CSR34, 40 C.F.R. Part 63 Subpart CCCCC]

4.2.5. For the purpose of determining compliance with the baffle washing requirements set forth in Section 4.1.35.4(b)(2), the baffles must be washed once each day that the tower is employed in the coke quenching operation, except during periods when the ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). During days that the baffles are not washed, the permittee shall conduct continuous monitoring of the ambient temperature.
[45CSR34, 40 C.F.R. §63.7342(d), 45CSR13, R13-2772, 4.2.1., (1E)]

4.2.6. For the purpose of determining compliance with the limits set forth in Sections 4.1.38. to 4.1.39, the permittee shall monitor the combined total amount of coal charged into Batteries 1, 2, and 3 on a hourly and monthly basis. This monthly total shall be sum with the previous eleven months total to get a 12 month rolling total as defined in Section 4.1.37. Such records shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2772, 4.2.2., (1E)]

4.2.7. The permittee shall inspect the quench tower monthly for damaged or missing baffles and blockage. Repairs of damage or missing baffles must initiate within 30 days of the detection and complete as soon as practicable. Such records of inspections and repairs shall be maintained in accordance with Section 3.4.2.
[45CSR34, 40 C.F.R. §§63.7295(b)(3), (4) and §63.7342(d), 45CSR13, R13-2772, 4.2.3., (1E)]

4.3. Testing Requirements

4.3.1. Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in 40 C.F.R. Part 63 Subpart L to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in 40 C.F.R. Part 63 Subpart L. If a facility pushes and charges only at night, then that facility must, at its option, change their schedule and charge during daylight hours or provide adequate lighting so that visible emission inspections can be made at night. "Adequate lighting" will be determined by the enforcement agency.

(1) Each performance test is to be conducted according to the procedures and requirements in 40 C.F.R. §63.309(a) and in Method 303 or 303A in 40 C.F.R. Part 63 Appendix A or Methods 9 and 22 in 40 C.F.R. Part 60 Appendix A (where applicable).

(2) Each performance test is to be conducted by a certified observer.

(3) The certified observer shall complete any reasonable safety-training program offered by the owner or operator prior to conducting any performance test at a coke oven battery.

[45CSR34, 40 C.F.R. §63.309(a)]

4.3.2. The certified observer shall conduct each performance test according to the requirements in this paragraph:

(1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door, topside port lid, and offtake system on each coke oven battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from each coke oven battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 or Method 303A in 40 C.F.R. Part 63 Appendix A. Observations from fewer

than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in 40 C.F.R. Part 63 Appendix A.

(2) If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.

(3) After each performance test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of Method 303 in to 40 C.F.R. Part 63 Appendix A.

(i) The owner or operator shall demonstrate pursuant to Method 303 in 40 C.F.R. Part 63 Appendix A the accuracy of the pressure measurement device upon request of the certified observer;

(ii) The owner or operator shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection;

(6) In no case shall the owner or operator knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

[45CSR34, 40 C.F.R. §63.309(c)]

4.3.3. Using the observations obtained from each performance test, the enforcement agency shall compute and record, in accordance with the procedures and requirements of Method 303 or 303A in 40 C.F.R. Part 63 Appendix A, for each day of operations on which a valid emissions value (or set of values) is obtained:

(1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems on each coke oven battery, using the equations in Method 303 (or Method 303A) in 40 C.F.R. Part 63 Appendix A;

(2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for each battery, using the equation in 40 C.F.R. Part 63 Appendix A, Method 303;

(5) For an approved alternative emission limitation for coke oven doors according to 40 C.F.R. §63.305, the weekly or monthly observation of the percent leaking coke oven doors using Method 303 in 40 C.F.R. Part 63 Appendix A, the percent opacity of visible emissions from the control device for the shed using Method 9 in 40 C.F.R. Part 60 Appendix A, and visible emissions from the shed using Method 22 in 40 C.F.R. Part 60 Appendix A;

[45CSR34, 40 C.F.R. §63.309(d)]

4.3.4. The certified observer shall make available to the implementing agency as well as to the owner or operator, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to the owner or operator as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.
[45CSR34, 40 C.F.R. §63.309(e)]

4.3.5. Compliance shall not be determined more often than the schedule provided for performance tests under Section 4.3.1. to 4.3.7. [40 C.F.R. §63.309]. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under Section 4.3.3. [40 C.F.R. §63.309(d)] or determinations under Section 4.1.6. – 4.1.9. [40 C.F.R. §63.306].
[45CSR34, 40 C.F.R. §63.309(f)]

4.3.6. For a flare installed to meet the requirements of Section 4.1.11. [40 C.F.R. §63.307(b)]:

(1) Compliance with the provisions in Section 4.1.12. [40 C.F.R. §63.307(c)] (visible emissions from flares) shall be determined using Method 22 in 40 C.F.R. Part 60 Appendix A, with an observation period of 2 hours; and

(2) Compliance with the provisions in Section 4.1.11(4) [40 C.F.R. §63.307(b)(4)] (flare pilot light) shall be determined using a thermocouple or any other equivalent device.

[45CSR34, 40 C.F.R. §63.309(h)]

4.3.7. No observations obtained during any program for training or for certifying observers under 40 C.F.R. Part 63 Subpart L shall be used to determine compliance with the requirements of 40 C.F.R. Part 63 Subpart L or any other federally enforceable standard.
[45CSR34, 40 C.F.R. §63.309(i)]

4.3.8. For the purpose of determining compliance with the water quality requirements set forth by Section 4.1.35.4(a)(2) and 4.1.31.(2)g., and the particulate matter emission limits set forth by Section 4.1.36.(5), the permittee shall monitor the concentration of total dissolved solids and total suspended solids within the makeup water supplied to the quench towers. The permittee shall conduct monthly water quality testing. Testing shall be performed to determine the maximum concentration of total dissolved solids within the makeup water feed. Such records shall be maintained in accordance with Condition 3.4.2. of this permit. (for Battery No. 8)
[45CSR13, R13-2591, 4.2.6.]

4.3.9. The permitted pushing, quenching and battery stacks operations (Batteries 1, 2, 3,and 8) shall comply with the following testing requirements of 40 C.F.R. Part 63, Subpart CCCCC - *National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks*, with the exception of any more stringent limitations set forth in this permit.

4.3.9.1. 40 C.F.R. §63.7320 By what date must I conduct performance tests or other initial compliance demonstrations?

(b) You must conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in 40 C.F.R. §63.7295(a)(1) and each opacity limit in 40 C.F.R. §63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in 40 C.F.R. §63.7283.

(c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in 40 C.F.R. §63.7283.

4.3.9.2. 40 C.F.R. §63.7321 When must I conduct subsequent performance tests?

For each control device subject to an emission limit for particulate matter in 40 C.F.R. §63.7290(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

4.3.9.3. 40 C.F.R. §63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in 40 C.F.R. §63.7322(b).

(b) To determine compliance with the emission limit for particulate matter from a control device applied to pushing emissions where a cokeside shed is the capture system, follow the test methods and procedures in 40 C.F.R. §63.7322(b)(1) and (2)(*C01)*. To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in 40 C.F.R. §63.7322(b)(1) through (4) (*C02)*.

(1) Determine the concentration of particulate matter according to the following test methods in 40 C.F.R. Part 60 Appendix A.

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

(2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to

comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

(3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven *(C02 only)*.

(4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows *(C02 only)*:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p = Process weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, gr/dscf;

Q = Volumetric flow rate of stack gas, dscf/hr;

T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;

P = Total amount of coke pushed during the test run, tons; and

K = Conversion factor, 7,000 gr/lb.

4.3.9.4. 40 C.F.R. §63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in 40 C.F.R. §63.7324(b).

(b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in 40 C.F.R. §§63.7324(b)(1) through (3).

(1) Using the continuous opacity monitoring system (COMS) required in 40 C.F.R. 63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

(2) Reduce the monitoring data to hourly averages as specified in 40 C.F.R. §63.8(g)(2).

(3) Compute and record the 24-hour (daily) average of the COMS data.

4.3.9.5. 40 C.F.R. §63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?

(a) If you elect the TDS limit for quench water in 40 C.F.R. §63.7295(a)(1)(i), you must conduct each performance test that applies to your affected source according to the conditions in 40 C.F.R. §63.7325(a)(1) and (2).

(1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the TDS concentration of the sample using Method 160.1 in 40 C.F.R. Part 136.3 (see "residue—filterable"), except that you must dry the total filterable residue at 103 to 105 °C (degrees Centigrade) instead of 180 °C.

(b) If at any time you elect to meet the alternative requirements for quench water in 40 C.F.R. §63.7295(a)(1)(ii), you must establish a site-specific constituent limit according to the procedures in 40 C.F.R. §§63.7325(b)(1) through (4).

(1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) For each sample, determine the TDS concentration according to the requirements in 40 C.F.R. §63.7325(a)(2) and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 C.F.R. Part 136 or an approved alternative method.

(3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit.

(4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review and approval.

(c) If you elect the constituent limit for quench water in 40 C.F.R. §63.7295(a)(1)(ii), you must conduct each performance test that applies to your affected source according to the conditions in 40 C.F.R. §§63.7325(c)(1) and (2).

(1) Take a quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in the sample using the applicable methods in 40 C.F.R. Part 136 or an approved alternative method.

4.3.9.6. 40 C.F.R. §63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in 40 C.F.R. §§63.7326(a)(1) through (4) that apply to you.

(1) The concentration of particulate matter, measured in accordance with the performance test procedures in 40 C.F.R. §§63.7322(b)(1) and (2), did not exceed 0.01 gr/dscf for a control device where a cokeside shed is used to capture pushing emissions *(C01 only)* or the process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in 40 C.F.R. §§63.7322(b)(1) through (4), did not exceed:

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions *(C02 only)*

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with 40 C.F.R. §63.7323(a) [*See "Note" in 4.1.35.8. for values*]. *(C02 only)*

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

(i) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3) for volumetric flow rate, you have a record of the total volumetric flow rate at the inlet of the control device measured during the performance test in accordance with 40 C.F.R. §63.7323(c)(1); or

(ii) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with 40 C.F.R. §63.7323(c)(2); or

(iii) If you elect the operating limit in 40 C.F.R. §63.7290(b)(3)(ii) for static pressure or fan RPM, you have a record of the static pressure at the inlet of the control device or fan RPM measured during the performance test in accordance with 40 C.F.R. §63.7323(c)(3).

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in 40 C.F.R. §63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in 40 C.F.R. §63.7324(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in 40 C.F.R. §63.7295(a)(1),

(1) You have demonstrated initial compliance with the TDS limit in 40 C.F.R. §63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in 40 C.F.R. §63.7325(a), does not exceed 1,100 mg/L.

(2) You have demonstrated initial compliance with the constituent limit in 40 C.F.R. §63.7295(a)(1)(ii) if:

(i) You have established a site-specific constituent limit according to the procedures in 40 C.F.R. §63.7325(b); and

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in 40 C.F.R. §63.7325(c), is less than or equal to the site-specific limit.

[45CSR34, 40 C.F.R. Part 63 Subpart CCCCC]

4.3.10. For the purpose of determining compliance with the water quality requirements set forth by Sections 4.1.35.4(a)(1)(i) and 4.1.35.4.(b)(1), and the particulate matter emission limits set forth by Section 4.1.38, the permittee shall monitor the concentration of total dissolved solids and total suspended solids within the makeup water supplied to the quench towers. The permittee shall conduct monthly water quality testing. Testing shall be performed to determine the maximum concentration of total dissolved solids within the makeup water feed. The permittee shall take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (*e.g.,* from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions. Method 160.1 in 40 C.F.R. Part 136.3 (see "residue—filterable" must be using in determining the TDS concentration of the sample, except that the total filterable residue must be dried at 103 to 105 °C (degrees Centigrade) instead of 180 °C. Records of such testing shall be maintained in accordance with Section 3.4.2. (for Batteries Nos. 1, 2, and 3)
[45CSR34, 40 C.F.R. §63.7325(a), 45CSR13, R13-2772, 4.3.1., (1E)]

4.4. Recordkeeping Requirements

4.4.1. The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator for the time period specified in 40 C.F.R §70.6(a)(3)(ii)(B). Copies of the work practice plan developed under Sections 4.1.6. – 4.1.9. [40 C.F.R. §63.306] and the startup, shutdown, and malfunction plan developed under Sections 4.1.18. – 4.1.26. [40 C.F.R. §63.310] shall be kept onsite at all times. The owner or operator shall maintain the following information:

(3) A copy of the work practice plan required by Sections 4.1.6. – 4.1.9. [40 C.F.R. §63.306] and any revision to the plan;

(4) If the owner or operator is required under Sections 4.1.8. [40 C.F.R.§63.306(c)] to implement the provisions of a work practice plan for a particular emission point, the following records regarding the implementation of plan requirements for that emission point during the implementation period;

(i) Copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under Sections 4.1.7.(1) [40 C.F.R. §63.306(b)(1)];

(ii) The records required to be maintained by the plan provisions implementing Sections 4.1.7.(7) [40 C.F.R. §63.306(b)(7)];

(iii) Records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under Sections 4.1.7.(2)(i) [40 C.F.R. §63.306(b)(2)(i)], (3)(i) [40 C.F.R. §63.306(b)(3)(i)], (4)(i) [40 C.F.R. §63.306(b)(4)(i)], or (5)(i) [40 C.F.R. §63.306(b)(5)(i)]; and

(iv) If the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under Sections 4.1.7.(2)(vi) [40 C.F.R. §63.306(b)(2)(vi)]; and

(5) The design drawings and engineering specifications for the bypass/bleeder stack flare system or approved alternative control device or system as required under Sections 4.1.10. – 4.1.13. [40 C.F.R. §63.307].

(6) Records specified in Sections 4.1.23. [40 C.F.R. §63.310(f)] regarding the basis of each malfunction notification.

[45CSR34, 40 C.F.R. §63.311(f)]

4.4.2. Records required to be maintained and reports required to be filed with the Administrator under 40 C.F.R. Part 63 Subpart L shall be made available in accordance with the requirements of this paragraph by the owner or operator to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying.

(1) Requests under Section 4.4.2. [40 C.F.R. §63.311(g)] shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;

(2) The owner or operator shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under 40 C.F.R. Part 2;

(3) Nothing in Section 4.4.2. [40 C.F.R. §63.311(g)] shall require the production for inspection or copying of any portion of a document that contains trade secrets or confidential business information that the Administrator would be prohibited from disclosing to the public under 40 C.F.R. Part 2; and

(4) The inspection or copying of a document under Section 4.4.2. [40 C.F.R. §63.311(g)] shall not in any way affect any property right of the owner or operator in such document under laws for the protection of intellectual property, including the copyright laws.

[45CSR34, 40 C.F.R. §63.311(g)]

4.4.3. The permittee shall maintain records of tons of coal charged to each of the coke oven batteries to be used in determining compliance with the requirements set forth in Sections 4.1.32. and 4.1.33. Records shall be expressed in tons of coal charged per day and be totaled at the end of each month. The permittee shall maintain these records for a period of 5 years.
[45CSR13, R13-1939, B.5., B.1.]

4.4.4. For the purpose of documenting the monitoring requirements associated with the quench towers set forth in Sections 4.2.2., 4.2.3., and 4.2.8., the permittee shall maintain the following records:

(1) Operating schedule of each quench tower.

(2) Total dissolved solids concentration and total suspended solids concentration of makeup water.

(3) Baffle inspection and cleaning, and the ambient temperature when applicable.

[45CSR13, R13-2591, 4.4.4.]

4.4.5. The permitted pushing, quenching and battery stacks operations (Batteries 1. 2. 3, and 8) shall comply with the following recordkeeping requirements of 40 C.F.R. Part 63, Subpart CCCCC - *National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks*, with the exception of any more stringent limitations set forth in this permit.

1. 40 C.F.R. §63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in 40 C.F.R. §63.7291(a), you must demonstrate continuous compliance according to the requirements of 40 C.F.R. §§63.7334(a)(1) through (8):

(1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by 40 C.F.R. §63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to 40 C.F.R. §63.7291(a)(4).

(2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in 40 C.F.R. §§63.7334(a)(1) through (8).

(3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in 40 C.F.R. Part 60 Appendix A using a Method 9 certified observer unless you have an approved alternative procedure under 40 C.F.R. §63.7334(a)(7).

(4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (40 C.F.R. Part 60 Appendix A). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in 40 C.F.R. §63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

(5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids

interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

(ii) For a battery with a cokeside shed, the observer must be in a position that provides an unobstructed view and avoids interferences from the topside of the battery. Typical interferences to avoid include emissions from open standpipes and charging. Observations must include any fugitive emissions that escape from the top of the shed, from the ends of the shed, or from the area where the shed is joined to the battery. If the observer does not have a clear view to identify when a push starts or ends, a second person can be positioned to signal the start or end of the push and notify the observer when to start or end the observations. Radio communications with other plant personnel (e.g., pushing ram operator or quench car operator) may also serve to notify the observer of the start or end of a push. Record the oven number of any push not observed because of obstructions or interferences.

(iii) You may reposition after the push to observe emissions during travel if necessary.

(7) If it is infeasible to implement the procedures in 40 C.F.R. §§63.7334(a)(1) through (6) for an oven due to physical obstructions, nighttime pushes, or other reasons, you may apply to your permitting authority for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in 40 C.F.R. §§63.7334(a)(1) through (6), identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with 40 C.F.R. §63.7291(a). Maintain records documenting conformance with the requirements in 40 C.F.R. §63.7291(a).

(d) For each by-product coke oven battery subject to the work practice standard for soaking in 40 C.F.R. §63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in 40 C.F.R. §§63.7294(a)(1) through (5).

(e) For each coke oven battery subject to the work practice standard for quenching in 40 C.F.R. §63.7295(b), you must demonstrate continuous compliance according to the requirements of 40 C.F.R. §§63.7334(e)(1) through (3):

(1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in 40 C.F.R. §63.7295(b)(1);

(2) Maintaining records that document conformance with the washing, inspection, and repair requirements in 40 C.F.R. §63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and

(3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in 40 C.F.R. §63.7295(a)(2).

2. 40 C.F.R. §63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in 40 C.F.R. §63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in 40 C.F.R. §63.7300(c) by meeting the requirements of 40 C.F.R. §§63.7335(b)(1) through (3):

(1) Making monthly inspections of capture systems according to 40 C.F.R. §63.7300(c)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to 40 C.F.R. §§63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a bag leak detection system alarm according to 40 C.F.R. §63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in 40 C.F.R. §63.7331(a), you must inspect and maintain each baghouse according to the requirements in 40 C.F.R. §§63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in 40 C.F.R. §63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) You must maintain a current copy of the operation and maintenance plans required in 40 C.F.R. §§63.7300(b) and (c) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

3. 40 C.F.R. §63.7342 What records must I keep?

(a) You must keep the records specified in 40 C.F.R. §§63.7342(a)(1) through (3).

(1) A copy of each notification and report that you submitted to comply with 40 C.F.R. Part 63 Subpart CCCCC, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

(2) The records in 40 C.F.R. §§63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in 40 C.F.R. §63.10(b)(2)(viii).

(b) For each COMS or CEMS, you must keep the records specified in 40 C.F.R. §§63.7342(b)(1) through (4).

(1) Records described in 40 C.F.R. §§63.10(b)(2)(vi) through (xi).

(2) Monitoring data for COMS during a performance evaluation as required in 40 C.F.R. §§63.6(h)(7)(i) and (ii).

(3) Previous (that is, superseded) versions of the performance evaluation plan as required in 40 C.F.R. §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records in 40 C.F.R. §63.6(h)(6) for visual observations.

(d) You must keep the records required in 40 C.F.R. §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

4. 40 C.F.R. §63.7343 In what form and how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

[45CSR34, 40 C.F.R. Part 63 Subpart CCCCC]

4.4.6. **Record of Maintenance of Air Pollution Control Equipment.** For the Batteries 1, 2, and 3 quench tower baffles, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2772, 4.4.2., (1E)]

4.4.7. **Record of Malfunctions of Air Pollution Control Equipment.** For the Batteries 1, 2, and 3 quench tower baffles, the permittee shall maintain records of the occurrence and duration of any malfunction or

operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2772, 4.4.3., (1E)]

4.4.8. For the purpose of documenting the monitoring requirements associated with the quench towers set forth in Sections 4.2.5., 4.2.6., and 4.2.7, the permittee shall maintain the following records:

1. Operating schedule of each quench tower.

[45CSR13, R13-2772, 4.4.4., (1E)]

4.5. Reporting Requirements

4.5.1. After the effective date of an approved permit in a State under 40 C.F.R. Part 70, the owner or operator shall submit all notifications and reports required by 40 C.F.R. Part 63 Subpart L to the State permitting authority. Use of information provided by the certified observer shall be a sufficient basis for notifications required under 40 C.F.R. §70.5(c)(9) and the reasonable inquiry requirement of 40 C.F.R. §70.5(d).
[45CSR34, 40 C.F.R. §63.311(a)]

4.5.2. *Notifications.* The owner or operator shall provide written notification(s) to the Administrator of:

(1) Intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and construction of a greenfield coke oven battery), a brownfield coke oven battery, or a padup rebuild coke oven battery, including the anticipated date of startup.

[45CSR34, 40 C.F.R. §63.311(c)]

4.5.3. *Semiannual compliance certification.* The owner or operator of a coke oven battery shall include the following information in the semiannual compliance certification:

(1) Certification, signed by the owner or operator, that no coke oven gas was vented, except through the bypass/ bleeder stack flare system of a by-product coke oven battery during the reporting period or that a venting report has been submitted according to the requirements in Section 4.5.4. [40 C.F.R. §63.311(e)];

(2) Certification, signed by the owner or operator, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in Section 4.1.22. [40 C.F.R. §63.310(e)]; and

(3) Certification, signed by the owner or operator, that work practices were implemented if applicable under Section 4.1.6. – 4.1.9. [40 C.F.R. §63.306].

[45CSR34, 40 C.F.R. §63.311(d)]

4.5.4. *Report for the venting of coke oven gas other than through a flare system.* The owner or operator shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the Administrator as soon as practicable but no later than 24 hours after the beginning of the event. A written report shall be submitted within 30 days of the event and shall include a description of the event and, if applicable, a copy of the notification for a hazardous substance release required pursuant to 40 C.F.R. § 302.6.
[45CSR34, 40 C.F.R. §63.311(e)]

4.5.5. The permitted pushing, quenching, battery stacks operations (Batteries 1, 2, 3, and 8) shall comply with the following reporting requirements of 40 C.F.R. Part 63, Subpart CCCCC - *National Emissions Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks*, with the exception of any more stringent limitations set forth in this permit.

1. 40 C.F.R. §63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(d) For each by-product coke oven battery stack subject to an opacity limit in 40 C.F.R. §63.7296(a) and each by-product coke oven battery subject to the requirements for quench water in 40 C.F.R. §63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to 40 C.F.R. §63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to 40 C.F.R. §63.7340(e)(2).

2. 40 C.F.R. §63.7327 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in 40 C.F.R. §63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in 40 C.F.R. §63.7283.

(d) For each by-product coke oven battery subject to the work practice standards for soaking in §63.7294, you have demonstrated initial compliance if you have met the requirements of 40 C.F.R. §§63.7327(d)(1) and (2):

(1) You have prepared and submitted a written work practice plan in accordance with § 40 C.F.R. §63.7294(a); and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in 40 C.F.R. § 63.7283.

(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards for quenching in 40 C.F.R. §63.7295(b) if you certify in your notification of compliance status that you have met the requirements of 40 C.F.R. §§63.7327(e)(1) and (2):

(1) You have installed the required equipment in each quench tower; and

(2) You will meet each of the work practice requirements beginning no later than the compliance date that is specified in 40 C.F.R. §63.7283.

(f) For each work practice standard that applies to you, you must submit a notification of compliance status according to the requirements in 40 C.F.R. §63.7340(e)(1).

3. 40 C.F.R. §63.7328 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

You have demonstrated initial compliance if you certify in your notification of compliance status that you have met the requirements of 40 C.F.R. §§63.7328(a) through (d):

(a) You have prepared the operation and maintenance plans according to the requirements in 40 C.F.R. §§63.7300(b) and (c);

(b) You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in 40 C.F.R. §63.7283; (*Batteries 1, 2, 3 and 8*) (*C01 and C02*)

(c) You have prepared a site-specific monitoring plan according to the requirements in 40 C.F.R. §63.7331(b); and

(d) You submit a notification of compliance status according to the requirements in 40 C.F.R. §63.7340(e).

4. 40 C.F.R. §63.7336 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation

and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in 40 C.F.R. §63.7341.

(b) Startup, shutdowns, and malfunctions.

(1) Consistent with 40 C.F.R. §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with 40 C.F.R. §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 C.F.R. §63.6(e).

5. 40 C.F.R. §63.7340 What notifications must I submit and when?

(a) You must submit all of the notifications in 40 C.F.R. §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 C.F.R. §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to 40 C.F.R. §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration (December 10, 2006).

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to 40 C.F.R. §63.10(d)(2).

6. 40 C.F.R. §63.7341 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in 40 C.F.R. §§63.7341(a)(1) through (4).

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.7283 and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(4) For each affected source that is subject to permitting regulations pursuant to 40 C.F.R. Part 70 or 40 C.F.R. Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 C.F.R. §§63.7341(a)(1) through (3).

(b) Quarterly compliance report contents. Each quarterly report must provide information on compliance with the emission limitations for battery stacks in 40 C.F.R. §63.7296. The reports must include the information in 40 C.F.R. §§63.7341(c)(1) through (3), and as applicable, 40 C.F.R. §§63.7341(c)(4) through (8).

(c) Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in 40 C.F.R. §§63.7341(c)(1) through (3), and as applicable, 40 C.F.R. §§63.7341(c)(4) through (8).

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in 40 C.F.R. §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in 40 C.F.R. §63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in 40 C.F.R. §§63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in 40 C.F.R. §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in 40 C.F.R. §§63.7341(c)(4) and (7)(i) and (ii). This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period. (*P001, P002, P003, P004*)

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in 40 C.F.R. §§63.7341(c)(4) and (8)(i) through (xii). This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in 40 C.F.R. §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) An identification of each HAP that was monitored at the affected source.

(ix) A brief description of the process units.

(x) A brief description of the continuous monitoring system.

(xi) The date of the latest continuous monitoring system certification or audit.

(xii) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

[R13-2772, 4.5.1, (1E), 45CSR34, 40 C.F.R. §63.7341(c)]

(d) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in 40 C.F.R. §63.10(d)(5)(ii).

(e) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 C.F.R. Part 70 or 40 C.F.R. Part 71, you must report all deviations as defined in 40 C.F.R. Part 63 Subpart CCCCC in the semiannual monitoring report required by 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in 40 C.F.R. Part 63 Subpart CCCCC, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

[45CSR34, 40 C.F.R. Part 63 Subpart CCCCC]

4.5.6. The permittee shall review and determine on a monthly basis if there were any exceedance of the conditions set forth under Sections 4.1.32. – 4.1.34. Should the permittee determine that an exceedance occurred, then the permittee shall submit a written report describing what the exceedance was and what measures the permittee has taken to prevent the exceedance from re-occurring.
[45CSR13, R13-1939, B.1., B.7.]

4.6. Compliance Plan

4.6.1. None

5.0 Source-Specific Requirements [Boilers #6 (P017), #7 (P018), #8 (P019), #9 (S1), #10 (S5) (Group 005) and emission point ID (E3, E4, and Stacks 11, 12)]

5.1. Limitations and Standards

5.1.1. Visible emissions from Emission Points E1 (i.e., Stack11), E2 (i.e., Stack12), E3, and E4 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR2, Section 3.3. **[45CSR13, R13-2591, 4.1.6., 45CSR§2-3.1]**

5.1.2. Compliance with the visible emission requirements of Section 5.1.1. [45CSR§2-3.1.] shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of Section 5.1.1. [45CSR§2-3.1.]. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control. **[45CSR§2-3.2]**

5.1.3. If the owner or operator of a fuel burning unit can demonstrate to the satisfaction of the Director that compliance with Section 5.1.1. [45CSR§2-3.1.] cannot practically be achieved with respect to soot blowing operations or during the cleaning of a fire box, the Director may formally approve an alternative visible emission standard applicable to the fuel burning unit for soot blowing periods; provided that the exception period shall not exceed a total of six (6) six minute time periods in a calendar day with visible emissions limited to thirty percent (30%) opacity, as determined in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or by using measurements from a certified continuous opacity monitoring system. **[45CSR§2-3.3]**

5.1.4. The Director may approve an alternative visible emission standard to that required under Section 5.1.1. [45CSR§2-3.1.], not to exceed twenty (20) percent opacity, upon the filing of a written petition by the owner or operator, which petition shall include a demonstration satisfactory to the Director:

a. That it is technologically or economically infeasible to comply with Section 5.1.1. [45CSR§2-3.1.];

b. That emissions from the fuel burning unit for which an alternative visible emission standard is proposed impact no area in which the National Ambient Air Quality Standards for particulate matter are being exceeded nor will any such emissions cause or contribute to a violation of the National Ambient Air Quality Standards for particulate matter in an area which currently meets such standards;

c. That the particulate weight emission standards under 45CSR§2-4. are being met, as determined in accordance with the Appendix to this rule -- "Compliance Test Procedures for 45CSR2";

d. That the fuel burning unit for which an alternative visible emission standard is proposed is at all times operated and maintained in accordance with the provisions of Section 5.1.9. [45CSR§2-9.2.];

e. That the fuel burning unit for which an alternative visible emission standard is proposed and its associated air pollution control equipment are incapable of being adjusted or operated at normal operating loads to meet the applicable visible emission standard;

f. That the owner or operator will install, calibrate, maintain and operate a continuous opacity monitoring system approved by the Director, for the fuel burning unit for which an alternative visible emission standard is proposed, and will submit the results of such monitoring system to the Director on a calendar monthly basis in a format approved by the Director, provided that this provision shall not apply to fuel burning units which employ wet scrubbing systems for emission control; and

g. That all other requirements of law and rules enforced by the Director will be met.

[45CSR§2-3.4]

5.1.5. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

a. For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units. Limit for the five boilers is 40.91 lb/hr. (*Stack 11 = 16.2 lb/hr; Stack 12 = 7.07 lb/hr; E3 = 8.82 lb/hr; and E4 = 8.82 lb/hr*)

[45CSR§2-4.1.]

5.1.6. Subject to the provisions of 45CSR2, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Director at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director. (see condition 5.1.5.)

a. The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and/or any permits concerning such source(s), and shall not be changed without the prior written approval of the Director.

[45CSR§2-4.2.]

5.1.7. If the number of similar fuel burning units located at one plant, each of which is meeting the requirements of 45CSR2, is expanded by the addition of a new unit(s), the total allowable emission rate for the new unit(s) shall be determined by the following formula. However, the maximum allowable emission rates given in Section 5.1.5. [45CSR§2- 4.1.] are not to be exceeded:

$$\mathbf{R_e = [(1 - (H_{et} - H_e) / H_{et}) R_{et}]}$$

Where,

R_e is the total allowable emission rate in pounds per hour for the new fuel burning unit(s);

H_{et} is the total design heat input in million B.T.U.'s per hour of the existing and new similar units;

R_{et} is the total allowable emission rate in pounds per hour corresponding to H_{et}; and

H_e is the total design heat input in million B.T.U.'s per hour for the new fuel burning unit(s).

[45CSR§2-4.3.]

5.1.8. The visible emission standards set forth in Section 5.1.1. to 5.1.4. [45 CSR§2-3.] shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary. **[45CSR§2-9.1.]**

5.1.9. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. **[45CSR§2-9.2.]**

5.1.10. The owner or operator of a fuel burning unit(s) subject to this rule shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in Section 5.1.1. to 5.1.7. [45CSR§§2-3. and 4]) as provided in one of the following subdivisions:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 5.1.10.a [45CSR§2-9.3.a], by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date and time of duration (with starting and ending times) of the period of excess emissions;

3. An estimate of the mass of excess emissions discharged during the malfunction period;

4. The maximum opacity measured or observed during the malfunction;

5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

5.1.11. A malfunction, as defined under this rule, constitutes an affirmative defense to an action brought for noncompliance with the weight emission standards under 45CSR§2-4. if the owner or operator demonstrates to the satisfaction of the Director that the requirements of Sections 5.1.9. and 5.1.10. [45CSR§§2-9.2. and 9.3] have been met.
[45CSR§2-9.4.]

5.1.12. In any enforcement proceeding, the owner or operator seeking to establish the occurrence of a malfunction has the burden of proof.
[45CSR§2-9.5.]

5.1.13. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary for a fuel burning unit to comply with the visible emission standards set forth in 45CSR§2-3. or any emergency situation or condition creating a threat to public safety or welfare, the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during the exception period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the emission standards under 45CSR§2-4. will not be exceeded during the exemption period.
[45CSR§2-10.1.]

5.1.14. Boiler #5 (Emission Point ID Stack 11) shall not be operated unless the permittee obtain the proper permit from the Director prior to restarting the boiler.
[45CSR13, R13-1939, A.21.]

5.1.15. The permittee shall fire only natural gas at coke plant boiler #8 (Emission Point ID Stack 12), unless an applicable permit is obtained from the Director.
[45CSR13, R13-1939, A.22.]

5.1.16. The following operating limits and conditions are specific to the construction of Boiler #9 (S1) and of Boiler #10 (S5) (*these limits and conditions are applicable to each boiler individually unless otherwise specified*):

(1) The primary fuel shall be coke oven gas with an average heat content of 489 Btu per cubic foot and a monthly average hydrogen sulfide concentration of 40 grains per 100 standard cubic feet. Natural gas, with an average rating of 1,000 Btu per cubic foot, shall be available as a secondary fuel to the boiler.

(2) Coke oven gas with an increased hydrogen sulfide concentration having a daily average of 275 grains per 100 standard cubic feet shall be burned during periods of desulfurization maintenance. Desulfurization maintenance outages shall occur a maximum of 528 hours per year.

(3) The maximum heat input shall be limited to 98 MMBtu per hour and 858,480 MMBtu per year.

(4) The emissions from Source S1 shall be vented through Emission Point E3. The emissions from Source S5 shall be vented through Emission Point E4.

(5) The coke oven gas supply pipeline shall be sampled with a continuous monitoring system (CMS) for the purpose of monitoring the hydrogen sulfide content of the coke oven gas fired in the boiler.

(6) Emissions vented though Emission Point E3 and through Emission Point E4 shall be limited to the following pollutants and associated emission rates shown in the table below for each emission point:

Pollutant	Emission Factor	Emissions Limits	
		Hourly (lbs/hr)	Annual[4] (tons/yr)
CO	18.4 lb/MMCF[1]	3.7	16.2
NO_X	80 lb/MMCF[1]	16.1	70.3
SO_2	Routine Operation[2]	27.0	127.9
	Desulfurization/ Maintenance[3]	148.2	
PM	0.012 lb/MMBtu	1.2	5.2
PM_{10}	0.012 lb/MMBtu	1.2	5.2
VOC	1.2 lb/MMCF	0.3	1.1

1- Emission factor specific to the combustion of coke oven gas.
2- Based on COG with a maximum H_2S concentration of 50 grains per 100 standard cubic feet.
3- Based on COG with a maximum H_2S concentration of 275 grains per 100 standard cubic feet.
4- Annual emissions are based on a total of routine operations for 8,232 hours and the desulfurization maintenance for 528 hours.

[45CSR13, R13-2591, 4.1.2. and 4.1.3.]

5.1.17. The following operating limits and conditions are specific to the construction of Boiler #6 (P017) and Boiler #7 (P018):

(1) The primary fuel shall be coke oven gas with an average heat content of 489 Btu per cubic foot and a monthly average hydrogen sulfide concentration of 40 grains per 100 standard cubic feet. Natural gas, with an average rating of 1,000 Btu per cubic foot, shall be available as a secondary fuel to the boiler.

(2) Coke oven gas with an increased hydrogen sulfide concentration having a daily average of 275 grains per 100 standard cubic feet shall be burned during periods of desulfurization maintenance. Desulfurization maintenance outages shall occur a maximum of 528 hours per year.

(3) The maximum heat input shall be limited to 90 MMBtu per hour and 788,400 MMBtu per year.

(4) The emissions from Source P017 and Source P018 shall be vented through Emission Point Stack 11.

(5) The coke oven gas supply pipeline shall be sampled with a continuous monitoring system (CMS) for the purpose of monitoring the hydrogen sulfide content of the coke oven gas fired in the boiler.

(6) Emissions vented though Emission Point Stack 11 shall be limited to the following pollutants and associated emission rates shown in the table below:

Pollutant	Emission Factor	Emissions Limits	
		Hourly (lbs/hr)	Annual[4] (tons/yr)
CO	18.4 lb/MMCF[1]	6.8	29.7
NO_X	0.16 lb/MMBtu[1]	29.5	129.0
SO_2	Routine Operation[2]	49.5	234.8
	Desulfurization/ Maintenance[3]	272.3	

Pollutant	Emission Factor	Emissions Limits	
		Hourly (lbs/hr)	Annual[4] (tons/yr)
PM	0.012 lb/MMBtu	2.2	9.5
PM_{10}	0.012 lb/MMBtu	2.2	9.5
VOC	1.2 lb/MMCF	0.5	2.0

1- Emission factor specific to the combustion of coke oven gas.
2- Based on COG with a maximum H_2S concentration of 50 grains per 100 standard cubic feet.
3- Based on COG with a maximum H_2S concentration of 275 grains per 100 standard cubic feet.
4- Annual emissions are based on a total of routine operations for 8,232 hours and the desulfurization maintenance for 528 hours.

[45CSR13, R13-2591, 4.1.4.]

5.1.18. The following conditions and requirements are specific to Boiler #8 (P019):

(1) CO emissions emitted to the atmosphere from the boiler shall not exceed 6.6 pounds per hour with an annual rate not to exceed 28.9 tpy. Compliance with this limit shall be satisfied by optimization of the CO concentration from the unit during the tune-up as required in Condition 5.1.19. and satisfying item (4) of this condition.

(2) NO_x emissions emitted to the atmosphere from the boiler shall not exceed 7.9 pounds per hour with an annual rate not to exceed of 34.4 tons per year. Compliance with this limit is satisfied by verifying the manufacturer's NOx emission setting and/or specification, if available, during the tune-up of the unit. Compliance with the annual limit is satisfied by complying with item (4) of this condition.

(3) The boiler shall only be fired with pipeline quality natural gas. This condition satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.

(4) The heat input of the boiler shall not be greater than 78.5 MMBtu/hr. Compliance with this limit for each boiler shall be satisfied by limiting the annual consumption of natural gas to 687.7 MM cubic feet, measured as a rolling 12 month rolling total.

[45CSR13, R13-2591, 4.1.5., 45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]

5.1.19. **40 CFR Part 63, Subpart DDDDD.** The permittee shall conduct an annual tune-up for each applicable boiler listed in Table 1.1 (i.e., Boiler #8 only) with the initial tune-up to complete by no later than January 31, 2016 (40 CFR §63.7510(e)) in accordance with the applicable requirements of 40 CFR 63, Subpart DDDDD. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. Subsequent tune-ups shall be no more than 13 months after previous tune-up and shall consist of the following:

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications,

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[45CSR13, R13-2591, 4.1.7., 40 CFR §63.7500(a)(1), §63.7505(a), §63.7510(e), §63.7515(d), §63.7540(a)(10), and Table 3 to Subpart DDDDD of Part 63—Work Practice Standards]

5.1.20. The permittee shall conduct a one-time energy assessment of the facility which shall include applicable boilers listed in Table 1.1. (i.e., Boiler #8 only) of this permit, as specified in Table 3 of 40 CFR 63 Subpart DDDDD. Pursuant to 40 CFR §63.7510(e), the energy assessment shall be completed no later than January 31, 2016.
[45CSR13, R13-2591, 4.1.8., 40 CFR §63.7500(a)(1), §63.7505(a), and Table 3 of 40 CFR 63 Subpart DDDDD]

5.2. Monitoring Requirements

5.2.1. The owner or operator of a fuel burning unit(s) shall monitor compliance with Sections 5.1.1. – 5.1.4. [45CSR§2-3] as set forth in an approved monitoring plan for each emission unit. Such monitoring plan(s) shall include, but not be limited to, one or more of the following: continuous measurement of emissions, monitoring of emission control equipment, periodic parametric monitoring, or such other monitoring as approved by the Director.

1. Direct measurement with a certified continuous opacity monitoring system (COMS) shall be deemed to satisfy the requirements for a monitoring plan. Such COMS shall be installed, calibrated, operated and maintained as specified in 40 C.F.R. Part 60 Appendix B, Performance Specification 1 (PS1). COMS meeting the requirements of 40 C.F.R. Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS1.

2. Monitoring plans pursuant to Sections 5.2.1. [45CSR§2-8.2.a.] shall be submitted to the Director within six (6) months of the effective date of 45CSR2. Approval or denial of such plans shall be within twelve (12) months of the effective date of 45CSR2 or six (6) months after receipt of the monitoring plan, whichever is later. The owner or operator may presume approval until notified otherwise.

3. Excursions outside the range of operating parameters associated with control or process equipment which are established in an approved monitoring plan will not necessarily constitute a violation of 45CSR2.

[45CSR§2-8.2.a.]

5.2.2. For the purpose of determining compliance with the operating and emission limits set forth by Section 5.1.16., 5.1.17., and 5.1.18, the permittee shall monitor the fuel consumption and operating schedule of Boilers #6, #7, #8, #9, and #10.
[45CSR13, R13-2591, 4.2.1.]

5.2.3. For the purpose of determining compliance with the continuous hydrogen sulfide monitoring requirements set forth by Sections 5.1.16. and 5.1.17, the permittee shall operate and maintain existing continuous hydrogen sulfide monitors in accordance with the requirements set forth by 40 C.F.R. §60.13; 40 C.F.R. Part 60 Appendix B - Performance Specifications 7; and 40 C.F.R. Part 60 Appendix F - Quality Assurance Procedure Number 1. Such records shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR13, R13-2591, 4.2.2.]

5.2.4. For each month, the permittee shall record the hours of operation and amount of natural gas consumed by the Boiler #8 (S4) and shall calculate the rolling yearly total of natural gas consumed. Such records shall be maintained in accordance with Condition 3.4.2. of this permit.
[45CSR13, R13-2591, 4.2.3., 45CSR16, 40 CFR §60.48c(g)(2) and 45CSR§2A-7.1.a.1.]

5.3. Testing Requirements

5.3.1. See Sections 3.3.2. through 3.3.5.

5.3.2. The owner or operator of a fuel burning unit(s) shall demonstrate compliance with Sections 5.1.1 – 5.1.4. [45CSR§2-3] by periodic testing in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Director, and Sections 5.1.5. – 5.1.7. [45CSR§2-4] by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the 45CSR2 Appendix or other equivalent EPA approved method approved by the Director. The owner or operator shall conduct such testing at a frequency to be established by the Director.
[45CSR§2-8.1.a.]

5.3.3. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of Sections 5.1.5. – 5.1.7. [45CSR§2-4]. Such tests shall be conducted in accordance with the appropriate method set forth in the 45CSR2 Appendix or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

1. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained.

[45CSR§2-8.1.b.]

5.3.4. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 5.1.5. [45CSR§2-4.1].
[45CSR§2-8.1.c.]

5.4. Recordkeeping Requirements

5.4.1. The owner or operator of a fuel burning unit(s) shall maintain on-site all records of monitored data established in the monitoring plan pursuant to Section 5.2.1. [45CSR§2-8.2.a.]. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.
[45CSR§2-8.3.a.]

5.4.2. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

5.4.3. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form.
[45CSR§2-8.3.d.]

5.4.4. For boiler #8, the permittee shall keep the following records in accordance with 40CFR§63.7555. This includes but not limited to the following information during the tune-up as required in Condition 5.1.19. and 40 CFR §63.7540:

a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. If concentrations of NO_x were taken during the tune-up of the unit, record of such measurements shall be included; and

b. A description of any corrective actions taken as a part of the tune-up.

[45CSR13, R13-2591, 4.4.5., 40 CFR §§63.7540(a)(10)(vi) and 63.7555]

5.4.5. For the purpose of documenting the continuous monitoring activities of Section 5.2.3, the permittee shall maintain records of the recorded emissions data for each of the affected emission points.
[45CSR§30-12.7.]

5.4.6. For boiler Nos. 6, 7, 9 and 10, the permittee shall maintain records of the average annual heat input of natural gas and the average annual heat input of the coke oven gas burned in each boiler. If the average annual heat input of coke oven gas during any 3 consecutive calendar years falls below 50 percent for any boiler, then that boiler will be subject to 40 CFR 63 Subpart DDDDD. If any of the four boilers become subject to Subpart DDDDD, in accordance with 40 CFR §63.7495(g), they must be in compliance with the applicable existing source provisions of Subpart DDDDD within 3 years after such unit becomes subject to Subpart DDDDD.
[45CSR§30-12.7.]

5.5. Reporting Requirements

5.5.1. The owner or operator shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring

plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b.]

5.5.2. For Boiler #8, the permittee shall submit a "Notification of Compliance Status" for boilers covered by this permit to the Director before the close of business on the sixtieth (60th) day after completion of the initial compliance demonstration as required in 40 CFR §63.7530(e) and (g). Such "Notification of Compliance Status" shall be in accordance with 40 CFR §63.9(h)(2(ii) and contain the information specified in 40 CFR §§63.7545(e)(1), and (8), which includes a statement the one time energy assessment was completed as required in Condition 5.1.20.
[45CSR13, R13-2591, 4.5.1., 40CFR§63.7545(e), §63.7530(e)]

5.5.3. For Boiler #8, the permittee shall submit "annual Compliance Report" for the boilers using CEDRI that is accessed through the EPA's Center Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form for this report is not available in CEDRI at the time the report is due, the permittee shall submit the report to the Administrator and Director using the address listed in Condition 3.5.3. The first report being submitted by no later than January 31, 2016 and subsequent reports are due on January 31 from thereafter. Such reports shall contain the information specified in 40 CFR §§63.7550(c)(5)(i) through (iv) and (xiv) which are:

a. Permittee and facility name, and address;

b. Process unit information, emission limitations, and operating limitations;

c. Date of report and beginning and ending dates of the reporting period;

d. The total operating time during the reporting period of each affected unit;

e. Include the date of the most recent tune-up for the boiler; and

f. Include the date of the most recent burner inspection if it was not done on annual tune-up period and was delayed until the next scheduled or unscheduled unit shutdown.

The permittee shall maintain records of these reports in accordance with Condition 3.4.2.
[45CSR13, R13-2591, 4.5.2., 40CFR §§63.7550(b), (b)(1), (c)(1), & (c)(5)(i) though (iv) and (xiv), and (h)(3)]

5.5.4. The permittee shall review and determine on a monthly basis if there were any exceedance of the conditions set forth under Sections 5.1.14. - 5.1.15. Should the permittee determine that an exceedance occurred, then the permittee shall submit a written report describing what the exceedance was and what measures the permittee has taken to prevent the exceedance from re-occurring.
[45CSR13, R13-1939, B.1., B.7.]

5.6. Compliance Plan

5.6.1. None

6.0 Source-Specific Requirements [Coal/Coke Handling, Coal Handling, Storage Pile Group, and Coke Screening System, P007-1 S40, SS40-a, SS40-b, SS40-c, SS40-d (Group 006) and emission point ID (C07, F17, C08, F18, C09, F19, E40, SS1-A/F1, SS1-B/F2, SS1-C/F3, SS1-D/F4, SS1-E/F5, SS2-A/F6, SS2-B/F7, SS2-C/F8, SS2-D/F9, SS2-E/F10)]

6.1. Limitations and Standards

6.1.1. Total particulate matter and PM_{10} emissions from Coal Crushing/Crusher shall not exceed 1.0 lb/hr and 0.51 lb/hr, respectively.
[CO-SIP-91-29, Section III.1.A.]

6.1.2. The coal crusher is housed within a fully enclosed structure that shall be maintained to achieve and assure a minimum 90% control efficiency of potential (uncontrolled) emissions of total particulate matter and PM_{10}.
[CO-SIP-91-29, Section III.1.B.]

6.1.3. There shall be no visible emissions from any point of the building housing the Coal Crushing/Crusher operations.
[CO-SIP-91-29, Section III.1.C.]

6.1.4. Compliance with Sections 6.1.1, 6.1.2, and 6.1.3. [Sections III.1.A., B. and C.] shall be demonstrated on and after November 14, 1991.
[CO-SIP-91-29, Section III.1.D.]

6.1.5. Compliance with 6.1.1, 6.1.2, and 6.1.3. [Sections III.1.A., B. and C.] shall be determined in accordance with the provisions of Sections 3.3.2. through 3.3.5. and Appendix B (B1). Only visible emission standards shall be applicable for emission control by passive (non-evacuated) full enclosure.
[CO-SIP-91-29, Section III.1.E.]

6.1.6. Total particulate matter and PM_{10} emissions from Coke Sizing and Screening operations at Stations No. 1 and No. 2 shall not exceed 1.48 lb/hr and 0.76 lb/hr, respectively from each station.
[CO-SIP-91-29, Section III.2.A.]

6.1.7. Coke Sizing and Screening operations at Stations No. 1 and No. 2 shall be performed within the existing fully enclosed structures that shall be maintained so as to achieve and assure a minimum 90% control efficiency of potential (uncontrolled) emissions of total particulate matter and PM_{10}.
[CO-SIP-91-29, Section III.2.B.]

6.1.8. There shall be no visible emissions exceeding 5% opacity from any point of the structures housing the Coke Sizing and Screening operations at Stations No. 1 and No. 2.
[CO-SIP-91-29, Section III.2.C.]

6.1.9. Compliance with Sections 6.1.6, 6.1.7, and 6.1.8. [Sections III.2.A., B., and C.] shall be achieved on and after November 14, 1991.
[CO-SIP-91-29, Section III.2.D.]

6.1.10. Compliance with Sections 6.1.6, 6.1.7, and 6.1.8. [Sections III.2.A., B. and C.] shall be determined in accordance with provisions of Sections 3.3.2. through 3.3.5. [Section IV] and Appendix B (B1) of this permit. Only visible emission standards shall be applicable for emission control by passive (non-evacuated) full enclosure.
[CO-SIP-91-29, Section III.2.E.]

6.1.11. The permittee shall employ one mobile screening unit and radial stacking conveyor identified as S40. Such emissions units shall be installed, operated, and maintained in accordance with the following limitation:

a. PM emissions from the sizing and handling of metallurgical coke shall not exceed 4.18 pounds per hour and 3.34 tons per year;

b. PM_{10} emissions from the sizing and handling of metallurgical coke shall not exceed 2.02 pounds per hour and 1.61 tons per year;

c. $PM_{2.5}$ emissions from the sizing and handling of metallurgical coke shall not exceed 1.92 pounds per hour and 1.53 tons per year;

d. Compliance with the emissions limits of items a. through c. shall be met by limiting the processing rate of metallurgical coke to 125 tons per hour and 200,000 tpy.

e. The height of the drop point from each belt conveyor shall be minimized at times in effort to minimize fugitive particulate from being discharged into the atmosphere.
[45CSR§7-5.1]

f. Visible emissions from the vibrating screen of the mobile screening unit shall not be discharged to the atmosphere in amounts greater than 20% opacity except for visible particulate matter emission less than 40% opacity for a period or periods aggregating no more than 5 minutes in any 60 minute period.
[45CSR§7-3.1., 45CSR§7-3.2.]

[45CSR13, R13-2798, 4.1.1., (E40)]

6.1.12. The mobile screen unit and radial stacking conveyor are permitted to be operated by its own dedicated internal combustion engine. These engines shall be installed, operated, maintained in accordance with the following limitations:

a. Emissions for each engine shall not exceed the following limits:

Pollutant	**$NMHC+NO_x$**	**CO**	**PM**
	g/hp-hr	g/kw-hr	g/kw-hr
Cummins QSB4.5 Engine (110 Bhp)	3.8	0.9	0.13
ISHIKAWAJIMA-SHIBAURA 404C-22 Engine (48 Bhp)	4.8	0.9	0.27

b. Each engine shall not be operated more than 1600 hours per year for any purpose, which shall include emergencies and maintenance/readiness tests;

c. Each engine shall be equipped with a non-resettable hour meter prior to the start-up of the engine;

d. Each engine shall be operated and maintained in accordance with the manufacturer's written instructions. A copy of such instruction shall be permanently maintained on site for the life of the engine;

e. All nonroad diesel fuel is subject to the following per-gallon standards until October 1, 2010;

i. Maximum sulfur content of 500 ppm;

ii. Cetane index or aromatic content as follows:

(1) A minimum cetane index of 40; or

(2) A minimum aromatic content of 35 % by volume.

[40 C.F.R. § 80.510(a)]

f. Beginning October 1, 2010, all nonroad diesel fuel is subject to the following per-gallon standards:

i. Maximum sulfur content of 15 ppm;

ii. Cetane index or aromatic content as follows:

(1) A minimum cetane index of 40; or

(2) A minimum aromatic content of 35 % by volume.

[40 C.F.R. § 80.510(b)]

[45CSR13, R13-2798, 4.1.2., (E40), 45CSR16, 40 CFR §§60.4204(b), 60.4207(b)]

6.1.13. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2798 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2798, 2.5.1.]

6.1.14. <u>The following requirement from 40 CFR 63 Subpart ZZZZ, is applicable to the mobile screen unit and radial stacking conveyor engines:</u>

The internal combustion engines powering the mobile screen unit and radial stacking conveyor must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart IIII, for compression ignition engines. No further requirements apply for this engine under 40 CFR 63 Subpart ZZZZ.
[45CSR34; 40 CFR §63.6590(c)(7)]

(Conditions 6.1.12., 6.1.15., and 6.1.16. contain the 40 CFR 60 Subpart IIII Requirements applicable to the mobile screen unit and radial stacking conveyor engines.)

6.1.15. The mobile screen unit and radial stacking conveyor engines must meet the emission standards of 40 CFR §60.4204 over the entire life of the engines.
[45CSR16; 40 CFR §60.4206]

6.1.16. The compliance requirements below, for the mobile screen unit and radial stacking conveyor engines must be followed:

a. The engine must be operated and maintained according to the manufacturer's emission-related written instructions;

b. Change only those emission-related settings that are permitted by the manufacturer; and

c. Meet the requirements of 40 CFR Parts 89, 94 and/or 1068 as they apply to the engine.

[45CSR16; 40 CFR §60.4211(a)]

6.1.17. The throughput of coke into the Station 1 Screen shall not exceed 125 tons per hour nor 100,000 tons per year. Compliance with the throughput limit shall be determined using a rolling 12 month total. For the purposes of this permit a rolling 12 month total shall mean the amount of coke processed at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2548, 4.1.1.]

6.1.18. The throughput of coke into the Station 2 Screen shall not exceed 125 tons per hour nor 100,000 tons per year. Compliance with the throughput limit shall be determined using a rolling 12 month total.
[45CSR13, R13-2548, 4.1.2.]

6.1.19. The permittee shall install and maintain an overhead tarp cover on each screening unit sufficient to minimize particulate emissions from the screens.
[45CSR13, R13-2548, 4.1.3.]

6.1.20. **Maintenance of Air Pollution Control Equipment.** The permittee shall install, operate, and maintain all pollution control equipment required by this permit in accordance with the manufacturer's specifications so as to provide the guaranteed minimum control efficiency, or with any more stringent control requirements as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2548, 4.1.8.]

6.2. Monitoring Requirements

6.2.1. For the purposes of demonstrating compliance with Sections 6.1.11.a through 6.1.11.d, and 6.1.12.b, the permittee shall monitor the amount of coke processed, and hours that each engine operated on a daily basis. Records of such monitoring and a 12-month rolling total shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2798, 4.2.1., (E40)]

6.2.2. For the purpose of determining compliance with the opacity limits of Section 6.1.11.f, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60 Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar week. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are detected during the weekly observation, then the permittee shall conduct an opacity reading of the respective source(s) using the procedures and requirements of 45CSR7A as soon as practicable, but within seventy-two (72) hours of the weekly check. This 45CSR7A observation is to determine if the source is operating in compliance with the visible emission standard in Section 6.1.11.f.

If, after a period of four consecutive weeks, readings have been taken according to schedule and with no exceedances beyond the limit set forth in Section 6.1.11.f and no individual readings greater than 40% opacity have been taken, subsequent readings may be taken once every month, with each set of readings covering one continuous, five minute period while the mobile screening unit is operating. If at any time a set of readings indicates a exceedance of the limit set forth in Section 6.1.11.f or contains an individual reading of greater than 40% opacity, subsequent sets of readings will be taken once every week until a period of four consecutive weeks passes during which readings have been taken according to schedule and no exceedances of the limit set forth in Section 6.1.11.f or no individual readings greater than 40% opacity have been observed. Such records shall be maintained in accordance with Section 3.4.2.

[45CSR13, R13-2798, 4.2.2., (E40)]

6.2.3. For the purposes of determining compliance with maximum throughput limits set forth in 6.1.17 and 6.1.18 the permittee shall monitor the amount of coke through the Station one and Station two screens as follows:

a. The permittee must designate equipment that will be used for loading the screeners and state the bucket capacity in cubic feet. If more than one piece of equipment will be used to load the screens, an initial average (10 scoops) must be obtained for each and, if there is a 10% or greater difference in weight, separate records must be kept for each piece of equipment. If the difference in weight is less than 10% combined records may be kept.

b. The permittee must keep records of any change in equipment or bucket capacity, including the date of such changes.

c. The permittee must establish the average weight of 10 scoops. Obtaining this 10 scoop average shall be coordinated with DAQ permitting and enforcement to allow an opportunity for representatives of either or both to be present during any loading and weighing.

d. Following successful completion of section 6.2.3.c. of this permit, the permittee must obtain the weight of two scoops per week for a month. If the average weight of any two-scoop weighing exceeds the 10 scoop average by more than 10%, the permittee must reestablish the 10 scoop average as outlined in section 6.2.3.c. of this permit.

e. Following successful completion of section 6.2.3.d. of this permit, the permittee shall continue to obtain the weight of two scoops per quarter. If the average weight of any two-scoop weighing exceeds the 10 scoop average obtained by section 6.2.3.c. of this permit by more than 10%, the permittee shall reestablish the 10 scoop average as outlined in section 6.2.3.c. of this permit and then repeat section 6.2.3.d of this permit.

[45CSR13, R13-2548, 4.2.1., 45CSR§30-12.7]

6.2.4. Refer to section 3.2.1. of this permit.

6.3. Testing Requirements

6.3.1. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance. (*SS1-B, SS2-B*)
[45CSR§13-6.1. *and* 45CSR13, Permit No. R13-2548, 4.3.1.]

6.4. Recordkeeping Requirements

6.4.1. The permittee shall keep on site all information or documents noting that internal engines for the mobile screening unit and radial stacking conveyor are certified in accordance with 40 C.F.R. Part 89 for the same model year and engine power or records of performance test results showing compliance with emission limits of Section 6.1.12.a of similar engine or manufacturer data indicating compliance with the emission limits of Section 6.1.12.a. Such records shall be maintained on site for the life of the engine at the facility.
[45CSR13, R13-2798, 4.4.4., (E40)]

6.4.2. The permittee shall maintain records of all monitoring data required by Section 6.2.2. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80 ^{o}F, 6 - 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix D. Should a visible emission observation be required to be performed per the requirements specified in method listed in 45CSR7A, the data records of each observation shall be maintained per the requirements of the method listed in 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (O/S) or equivalent
[45CSR13, R13-2798, 4.4.5., (E40)]

6.4.3. For the purposes of determining compliance with maximum throughput limits set forth in 6.1.17 and 6.1.18 and the monitoring requirement set forth in 6.2.3 the permittee shall maintain certified daily and monthly records of the amount of coke through the Station 1 and Station 2 screens. Such records shall be retained on-site by the permittee for at least five (5) years and shall be made available to the Director or his duly authorized representative upon request. Further, the records for the 10 scoop averaging must be maintained for the duration of the use of that number, even if beyond 5 years.
[45CSR13, R13-2548, 4.4.4.]

6.4.4. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment required by this permit, the permittee shall maintain accurate records of inspection and/or preventative maintenance schedules, the results of the inspection and/or preventative maintenance activities, and any corrective actions taken. (*SS1-B, SS2-B*)
[45CSR13, R13-2548, 4.4.2.]

6.4.5. Record of Malfunctions, Operational Shutdowns, and Other Events of Air Pollution Control Equipment. The permittee shall maintain accurate records of all maintenance activities, malfunctions, and other operational shutdowns for designated pollution control equipment or process equipment employed for the purpose of emissions reduction required by this permit. For each such case, the following information, at a minimum, must be recorded. (*SS1-B, SS2-B*):

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information must also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2548, 4.4.3.]

6.5. Reporting Requirements

6.5.1. Any exceedances of the allowable visible emission requirement for any emission source discovered during observations using the Method listed in 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the exceedances, and any corrective measures taken or planned.
[45CSR13, R13-2798, 4.5.1., (E40)]

6.6. Compliance Plan

6.6.1. None

7.0 Source-Specific Requirements [Plant Roadways and Parking (Group 007)]

7.1. Limitations and Standards

7.1.1. The Company shall continue to comply with dust control measures on all unpaved roads identified in this Section in a manner that achieves and assures 95% control efficiency as determined by methodology set forth in the USEPA reference document Control of Open Fugitive Dust Sources (EPA/450/3-88-008), Section 3.0, Unpaved Roads and in accordance with the following:

1. All unpaved roads in Appendix C, Table 1, shall be treated at least every three weeks (tri-weekly) following the initial establishment of chemical ground inventory with a chemical dust suppressant (petroleum resin emulsion, asphalt emulsions or acrylic cements) on a year-round (12 month) basis, except as provided under Section 7.1.1.5. and 7.1.12.

2. Tri-weekly applications shall be accomplished within twenty-three (23) days of prior applications except as provided under Section 7.1.1.5.

4. A minimum ground inventory of 0.25 gallons of concentrate per square yard of road surface, as specified in Section 3.0 of the USEPA reference document *Control of Open Fugitive Dust Sources* (EPA/450/3-88-008) shall be maintained.

5. Tri-weekly applications of dust suppressant may be delayed by not more than three (3) days from any scheduled date upon which the unpaved road surface is frozen, snow covered, or has experienced ≥ 0.25 inches of rainfall.

In the event of persistent adverse weather conditions such as freezing, snow cover, or excessive rainfall, the Company may petition the Director verbally with written confirmation provided in quarterly report for extended exemptions which may be granted as deemed appropriate by the Director.

[CO-SIP-91-29, Section III.5.A.]

7.1.2. The Company shall continue to comply with dust control measures on all unpaved parking lots, laydown, entrance, loading, unloading areas, berms, and irregular paved surfaces that can not be adequately cleaned under the provisions of Section 7.1.6. through 7.1.9. in accordance with the following:

1. After the initial treatment to establish the required ground inventory of chemical dust suppressant within the first 2 months of the unpaved surface dust control program, all unpaved areas and irregular paved surfaces identified in Table 1 of Appendix C shall be treated with chemical dust suppressant (petroleum resin emulsion, asphalt emulsion or acrylic cements) at least at the frequencies set forth in Appendix C, Table 1 on a year round (12 month) basis.

2. Monthly and quarterly applications shall be made before the end of the first full week of the month/quarter except that the Company may seek extensions of time due to persistent adverse weather conditions in accordance with Section 7.1.1.5.

3. For each monthly/quarterly application after the initial 2 month treatment period, the concentrated dust suppressant shall be diluted at a ratio of not more than seven (7) parts water to one (1) part concentrate and the resulting solution shall be applied at a minimum coverage rate of 0.5 gallons per square yard of surface area.

[CO-SIP-91-29, Section III.5.B.]

7.1.3. Compliance with Sections 7.1.1. and 7.1.2. shall be determined in accordance with procedures described in Appendix B2.
[CO-SIP-91-29, Section III.5.C.]

7.1.4. Control Equipment

The Company shall assure the availability, required scheduling, and proper maintenance of spray trucks that are designed and equipped, at minimum with a 2,000 gallon capacity tank, a spray bar system capable of applying the dust suppressant solution at a coverage rate of at least 1.3 gallons per square yard of surface, a certified flow metering device calibrated in units of gallons per minute, and apparatus that will facilitate manual application of the solution to areas not readily accessible by the spray truck.
[CO-SIP-91-29, Section III.5.D.]

7.1.5. The Company shall continue to implement the dust control measures of Sections 7.1.1. through 7.1.4.
[CO-SIP-91-29, Section III.5.F.]

7.1.6. The Company shall implement, maintain, and comply with dust control measures on all paved roads identified in this Section in a manner that achieves and assures 95% control efficiency as determined by methodology set forth in the USEPA reference document *Control of Open Fugitive Dust Sources* (EPA/450/3-88-008), Section 2.0, Paved Roads, and in accordance with the following:

1. All paved roads identified in Table 1 of Appendix C shall be cleaned via concurrent water flushing and vacuum sweeping on a daily, year-round (12 month) basis except as provided under Section 7.1.6.1.a and b.

   a. Daily flushing and sweeping may be suspended only under the following adverse weather conditions:

Weather Condition	Permitted Exemption
$\geq$ 0.25 inches rainfall	Flushing
Freezing surface	Flushing
Snow cover	Flushing and sweeping

   All such suspensions shall be reported and verified as required under Sections 7.4.2. through 7.4.3. (Recordkeeping and Reporting).

   b. Irregular paved surfaces that cannot feasibly or adequately be cleaned by vacuum sweeping shall be chemically sprayed in accordance with provisions of Sections 7.1.1. through 7.1.5.

[CO-SIP-91-29, Section III.6.A.]

7.1.7. Compliance with Section 7.1.6. shall be determined in accordance with procedures set forth in Appendix B B3.
[CO-SIP-91-29, Section III.6.B.]

7.1.8. Control Equipment

1. The Company shall assure the availability, required scheduling, and proper maintenance of vacuum sweeping trucks. These trucks shall be equipped with an adequate water tank and a spray bar mounted ahead of the brooms unless separate vehicles are utilized for flushing. The collection hopper of the vacuum truck shall be designed and maintained so as to prevent fugitive dust emissions.

2. Material collected by the vacuum sweeping truck shall be handled and disposed of in a manner that minimizes fugitive dust emissions, including but not limited to, wet dumping and chemical treatment or stabilization of stored material.

[CO-SIP-91-29, Section III.6.C.]

7.1.9. The Company shall continue to implement the dust control measures of Sections 7.1.6. through 7.1.8.
[CO-SIP-91-29, Section III.6.E.]

7.1.10. The Company has the right to petition the Director and the USEPA for written approval of definitive treatment methods, treatment schedules and procedures or reporting requirements different from those required herein. Such alternative practices must be demonstrated to the Commission and USEPA to result in equivalent dust control effectiveness in accordance with *Control of Open Fugitive Dust Sources* (EPA/450/3-88-008). Notwithstanding the provision of Paragraph VI.1 of Consent Order (CO-SIP-91-29), the Company reserves the right to contest any disapproval of such petition in the appropriate judicial forum.
[CO-SIP-91-29, Section III.7.A.]

7.1.11. In the event that the Company certifies that all of a roadway or parking area identified in Appendix C has been discontinued, the dust suppression or surface cleaning program for that road or parking lot may be terminated or reduced. If the Company begins to utilize any new roadway, parking lot or other vehicular activity area not shown in Appendix C, it must notify the Director in the reports required under Consent Order (CO-SIP-91-29) and treat or clean the road or area in accordance with the procedures contained herein.
[CO-SIP-91-29, Section III.7.B.]

7.1.12. The Director shall not be precluded from requiring adjustments, including increased chemical suppressant application or cleaning, if on-site inspections reveal that the program contained herein does not prevent excessive visible dust entrainment and emissions from a particular road or surface.
[CO-SIP-91-29, Section III.7.C.]

7.1.13. In the event that an unpaved road or area that has been chemically treated becomes completely hardened and cemented by such treatment so as to become like a paved road as demonstrated by observation, by compaction tests and silt analyses or in the event that the Company paves any unpaved haul road or area, that road or area may be treated as a paved surface and cleaned in accordance with the procedures outlined in Sections 7.1.6. through 7.1.9.
[CO-SIP-91-29, Section III.7.D.]

7.2. Monitoring Requirements

7.2.1. Reserved

7.3. Testing Requirements

7.3.1. See Appendix B

7.4. Recordkeeping Requirements

7.4.1. The Company shall maintain records relative to the program to control emissions from unpaved roads, parking lots, laydown, entrance, unloading areas and berms identified in Appendix C, Table 1. These records shall include, at a minimum, the following information:

a. Control equipment maintenance records.

b. Scheduled and unscheduled equipment malfunctions and downtime.

c. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrences.

d. The date, type and quantity received for each delivery of chemical dust suppressants.

e. For each dust suppressant application date, start and stop times, average truck speed, number of passes and amount of solution applied for each unpaved road, area or berm identified in Appendix C, Table 1.

f. Identification of areas where manual spraying was utilized.

[CO-SIP-91-29, Section III.5.E.1.]

7.4.2. Records in Sections 7.4.1. and 7.4.3. shall be retained by the Company for three (3) years and shall be made available to the Director or his representative upon request.
[CO-SIP-91-29, Section III.5.E.2., 6.D.2.]

7.4.3. The Company shall maintain daily records for the paved road cleaning program, Sections 7.1.6. through 7.1.9. These records shall include, at a minimum, the following information:

a. Control equipment maintenance records.

b. Scheduled and unscheduled equipment malfunctions and downtime.

c. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrences.

d. Qualitative description of the road surface conditions.

e. Start and stop times, average truck speed, number of passes and estimation of amount of water used for each paved road identified in Appendix C, Table 2.

f. Identification of areas where chemical treatment was utilized.

g. Qualitative descriptions of areas of unusually high silt loadings from spills and track-ons.

h. Total amount of dust collected by vacuum trucks in pounds or tons.

[CO-SIP-91-29, Section III.6.D.1.]

7.5. Reporting Requirements

7.5.1. A calendar quarterly report shall be submitted to the Director. The report shall contain all of the information cited in Sections 7.4.1. and 7.4.3. and a description of any deviations from the control program and the reasons for such deviations. The report shall be certified to be accurate by management and shall be submitted by the end of the month following the calendar quarter.
[CO-SIP-91-29, Section III.5.E.3. and 6.D.3.]

7.5.2. The Company shall notify the Director, in writing, of any non-compliance with Sections 7.1.1. through 7.1.5. and Sections 7.1.6. through 7.1.9. Such notice shall be submitted quarterly and shall include a detailed explanation of the cause of such non-compliance, all remedial actions required, and the date by which compliance was or will be re-established.
[CO-SIP-91-29, Section III.5.E.4. and 6.D.4.]

7.6. Compliance Plan

7.6.1. None

8.0 Source-Specific Requirements [By-Product Plant, Coke Oven Gas Flare (Group 009) and emission point ID(s) (C06, F29, F30, P34, Stacks 14 and 15)]

8.1. Limitations and Standards

8.1.1. Emissions from the coal tar loading station (ID P021-22), Emission Point ID F34, shall not exceed the following:

Pollutant	lb/hr	ton/yr
Benzene	1.89	0.426
Toluene	0.42	0.094
Xylenes	0.09	0.022
Indene	0.07	0.017
Naphthalene	0.17	0.038
Styrene	0.04	0.010

[45CSR13, R13-1652, (A)1.]

8.1.2. Fill rate of rail tank cars shall not exceed 20,000 gallons per hour, 40,000 gallons per day, and 6 million gallons per year of coal tar.
[45CSR13, R13-1652, (A)2.]

8.1.3. The permittee shall continue the established leak detection and repair program per 40 C.F.R. Part 61 Subparts L and V. [*Note – The LDAR program requirements are contained in 8.1.30.-8.1.46., 8.1.49.-8.1.108, 8.2.1.-8.2.3., 8.3.1-8.3.6., 8.4.1.-8.4.12., and 8.5.2.–8.5.9.*].
[45CSR13, R13-1652, (A)3.]

8.1.4. The permitted facility must be constructed and operated in accordance with information filed in Permit Application No. 1652. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1652, General Requirements, 3.]

8.1.5. Maximum emissions to the atmosphere from the Excess Coke Oven Gas (COG) Flare (Emission Unit P024-1) shall not exceed the following limits:

Pollutant	Hourly Emissions (lb/hr)	Maximum Hourly Emissions during the Desulfurization Outage (lb/hr)	Annual Emissions* (tpy)
Carbon Monoxide	62.2	62.2	273.3
Nitrogen Oxides	11.4	11.4	50.1
Particulate Matter	2.0	2.0	8.8
PM-10	2.0	2.0	8.8
Sulfur Dioxide	39.8	396*	294.0
Volatile Organic Compounds	23.5	23.5	103.0

* Annual Emission accounts for the desulfurization unit being down 672 hours per year for schedule maintenance and maximum hydrogen sulfide concentration of 479 grains per 100 cu. ft. of COG
[45CSR13, R13-1939, A.1., B.1.]

8.1.6. For the purposes of maintaining compliance with the annual emission limits in Section 8.1.5, the daily flow rate of COG to the excess COG flare (Emission Unit P024-1) shall not exceed 7.1 MM standard cubic feet per day over a thirty day rolling average. The permittee shall keep daily records of flow rate of COG to the flare and correct the measured flow rate to a standard temperature of 68^0F. Compliance shall be determined using a thirty day rolling average.
[45CSR13, R13-1939, A.2., B.1.]

8.1.7. For the purposes of maintaining compliance with the sulfur dioxide emission limits in Section 8.1.5, the hydrogen sulfide concentration level in the COG stream from the by-products plant shall not exceed 50 grains of hydrogen sulfide per one hundred (100) cubic feet of COG except as noted in Section 8.1.8. Compliance with the allowable hydrogen sulfide concentration level shall be based on three (3) hour averaging periods.
[45CSR13, R13-1939, A.5., B.1.]

8.1.8. For the purpose of maintaining compliance with the sulfur dioxide emission limits in Section 8.1.5, while the desulfurization unit is down for scheduled maintenance, the permittee shall calculate and record the hourly sulfur dioxide emission rate of the flare and boilers #6 and #7 over a 24-hour period using the recorded mean hydrogen sulfide concentration level and the recorded standard flow rate for the respective day. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-1939, A.6., B.1.]

8.1.9. The permittee shall be limited to a maximum of twenty-eight (28) days in any calendar year for planned maintenance outages of the desulfurization unit in the coke by-products recovery plant. No single scheduled outage period shall extend beyond 336 hours. The start of a planned maintenance shall begin at the time of the first hour of a three-hour average concentration that is greater than 50 grains of H_2S/100 cubic feet of COG. The planned maintenance shall be concluded when at the time of the first hour of a three-hour average concentration that is less than or equal to 50 grains of H_2S/100 cubic feet of COG.
[45CSR13, R13-1939, A.7., B.1.]

8.1.10. The permittee shall notify the Director in writing thirty (30) days prior to undertaking any planned maintenance outage of the desulfurization unit. Such notice shall include, at a minimum, a detailed explanation of each and every maintenance and/or repair activity intended to be undertaken and a schedule for completion of each such activity, as well as evidence of compliance with the Sections 8.1.11. and 8.1.12.
[45CSR13, R13-1939, A.8., B.1.]

8.1.11. The permittee shall select the period for the planned maintenance outage that would prevent to the greatest extent practicable any violation of the National Ambient Air Quality Standard ("NAAQS") for sulfur dioxide, utilizing, at a minimum, air quality dispersion modeling to determine what periods represent the most favorable dispersion of excess sulfur dioxide emissions. To ensure maintenance of the 24-hour NAAQS for SO_2, a modeling target for SO_2 concentration for the high 24-hour value of 265 $\mu g/m^3$ shall be used to provide a margin of 100 $\mu g/m^3$ for other source impacts within the immediate vicinity of this facility.
[45CSR13, R13-1939, A.9., B.1.]

8.1.12. Prior to any planned maintenance outage of the desulfurization unit, the permittee shall prepare and submit a SO_2 mitigation plan to the Director outlining what measures the permittee will employ during the outage

to ensure continued attainment of the NAAQS. This plan shall include the employment of all feasible control measures and process changes at the Follansbee Facility to reduce SO_2 emissions from the Follansbee Facility, including, but not limited to reduction of the coke production rate at the Coke Oven Batteries #1, #2, #3 and #8.
[45CSR13, R13-1939, A.10., B.1.]

8.1.13. No later than thirty (30) days after completing a planned maintenance outage of the desulfurization unit, the permittee shall submit a report identifying the sulfur dioxide impacts associated with the planned maintenance outage of the desulfurization unit. This report shall include any deviation of the SO_2 mitigation plan that was submitted for the respective outage period.
[45CSR13, R13-1939, A.11., B.1.]

8.1.14. Visible emissions from the excess COG flare (Emission Unit P024-1) shall not exceed twenty percent (20%) opacity except upon the first eight (8) minutes of starting the flare then the visible emissions from this emission point shall not exceed forty percent (40%) opacity for this time period. The permittee shall demonstrate compliance with this condition by taking visual observations using U.S. EPA Method 22 once a month. Should the permittee observe visible emissions from the flare using Method 22, then the permittee shall conduct an additional observation within 24-hours of the Method 22 using U.S. EPA Method 9 to determine the opacity of the visible emissions being emitted from the flare.
[45CSR13, R13-1939, A.12., B.1.]

8.1.15. The permittee shall operate and maintain a continuous hydrogen sulfide monitor and recorder for the purpose of monitoring the hydrogen sulfide concentration of the sweetened COG before being routed to any combustion unit or source utilizing COG. This monitor shall be installed and maintained in accordance with Performance Specification 7-Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring System in Stationary Sources of 40 C.F.R. Part 60 Appendix B. The permittee shall develop and implement quality assurance measures and procedures to ensure the accuracy of this monitor in accordance with Appendix F to Part 60-Quality Assurance Procedures of Chapter 40 of the Code of Federal Regulations. Such records of the measurements and calibration reports shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-1939, A.14., B.1.]

8.1.16. The permittee shall maintain in accordance with the manufacturer's instructions flow-measuring devices for the purpose of measuring and recording the amount of COG consumed by the excess COG flare and Boilers #6 and #7. The permittee shall keep daily records of the amount of COG consumed by the above mentioned units. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-1939, A.15., B.1.]

8.1.17. The permittee shall maintain the automatic re-ignition system in accordance with the manufacture's specifications.
[45CSR13, R13-1939, A.16., B.1.]

8.1.18. The permittee shall not vent any un-combusted COG into the open atmosphere through excess COG flare (Emission Unit P024-1). The permittee shall record the date and time of an event when the flare was not in operation and COG was being emitted to the atmosphere at Emission Point P024-1. The permittee shall submit a report explaining this event and measures the permittee is taking to prevent the event from re-

occurring. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-1939, A.17., B.1.]

8.1.19. The permittee shall continuously maintain a system around this permitted facility to prevent the general public from accessing the facility.
[45CSR13, R13-1939, A.18., B.1.]

8.1.20. Compliance with the allowable emission limits stated in Section 8.1.5. shall be calculated using the appropriate amount of COG combustion by the excess COG flare on a volumetric basis, higher heat value of 568 Btu/cu. ft. for COG, and the following factors: Carbon Monoxide (0.37 lb/MM Btu), Nitrogen oxides (0.068 lb/MM Btu),Particulate Matter (0.012 lb/MM Btu) Particulate Matter 10 microns (0.012 lb/MM Btu), Volatile Organic Compounds (0.14 lb/MM Btu). The permittee shall determine the amount of each pollutant emitted on monthly basis using the above mentioned information and appropriate engineering calculations. The permittee shall keep a 12 month rolling total for each of above mentioned pollutants.
[45CSR13, R13-1939, A.19., B.1.]

8.1.21. The following condition only applies when the permittee is conducting an approved planned maintenance outage as permitted in Section 8.1.10. In the event of unforeseen circumstance beyond the control of the permittee, the permittee may exceed the SO_2 emission limit for the flare as stated in Section 8.1.5. in order to prevent an anticipated excursion of the SO_2 NAAQS from occurring in the local area, which include the city of Weirton, WV. The permittee shall document in the Desulfurization System Outage Report the unforeseen circumstances, SO_2 emissions rate calculation, and modeling results to document the necessity of the temporary increase in the flare's SO_2 allowable emissions rate.
[45CSR13, R13-1939, A.20., B.1.]

8.1.22. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-1939A, R13-1939 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1939, C.3.]

8.1.23. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6., 45CSR13, R13-1939, B.1., B.3.]

8.1.24. Reserved

8.1.25. Any owner or operator of a by-product coke production facility in existence on the effective date of 45CSR10 who can demonstrate to the Director that there is no practical alternative to scheduled maintenance (including shutdown) of desulfurization equipment may request the approval of an enforceable, temporary sulfur dioxide emissions control and mitigation plan for such maintenance period. In order for a plan under 45CSR§10-5. to be approved the plan must meet the following conditions:

b. Provide for a definitive reduction in sulfur dioxide emissions by the establishment of unit-specific allowable emission rates for all emissions units of the stationary source sufficient to prevent any violation of federal and state ambient air quality standards or applicable air quality increments for sulfur dioxide.

c. Provide that system down-time and excess sulfur dioxide emissions be reduced to the greatest extent possible by use of increased or contract maintenance personnel, maximized maintenance labor shifts and optimization of available spare parts inventories.

g. Provide for annual review, if necessary, modification or termination of the plan by the Director.

h. Provide that the Director may impose limitations on emission units that are more restrictive than those provided for in the plan as necessary to assure attainment of air quality standards for sulfur dioxide in light of data provided pursuant to 45CSR§10-5.2.f, or any other information available to the Director.

[45CSR§10-5.2., 45CSR13, R13-1939, B.1., B.4.]

8.1.26. Reserved

8.1.27. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 45CSR10 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§10-9.1., 45CSR13, R13-1939, B.1., B.4.]

8.1.28. Reserved

8.1.29. Reserved

8.1.30. Each owner or operator of a furnace coke byproduct recovery plant shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.
[45CSR34, 40 C.F.R. §61.132(a)(1)]

8.1.31. The owner or operator shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in Section 8.3.5. [40 C.F.R. §61.245(c)]. This system can be designed as a closed, positive pressure, gas blanketing system.

(i) Except, the owner or operator may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(ii) The owner or operator may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the owner or operator elects to maintain an opening on part of the liquid surface of the tar decanter, the owner or operator shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

[45CSR34, 40 C.F.R. §61.132(a)(2)]

8.1.32. Following the installation of any additional control equipment used to meet the requirements of Section 8.1.30. and 8.1.31. [40 C.F.R. §61.132(a)], the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 C.F.R. Part 60 Appendix A) and procedures specified in Section 8.3.5. [40 C.F.R. §61.245(c)], and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

(1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21 (40 C.F.R. Part 60 Appendix A), a leak is detected.

(2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.132(b)]

8.1.33. The owner or operator shall conduct a maintenance inspection of the control system used to meet the requirements of Section 8.1.30. and 8.1.31. [40 C.F.R. §61.132(a)] on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection.
[45CSR34, 40 C.F.R. §61.132(c)]

8.1.34. Each owner or operator of a furnace coke by-product recovery plant also shall comply with the requirements of Section 8.1.30. - 8.1.33. [40 C.F.R. §§61.132(a) - (c)] for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.
[45CSR34, 40 C.F.R. §61.132(d)]

8.1.35. Each owner or operator of a light-oil sump shall enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.

(1) Except, the owner or operator may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

(2) Except, the owner or operator may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(3) The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.

[45CSR34, 40 C.F.R. §61.133(a)]

8.1.36. The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.
[45CSR34, 40 C.F.R. §61.133(b)]

8.1.37. Following the installation of any control equipment used to meet the requirements of Section 8.1.35. [40 C.F.R. §61.133(a)], the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 C.F.R. Part 60 Appendix A) and the procedures specified in Section 8.3.5. [40 C.F.R. §61.245(c)], and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

(1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21 (40 C.F.R. Part 60 Appendix A), a leak is detected.

(2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.133(c)]

8.1.38. No ("zero") emissions are allowed from naphthalene processing, final coolers and final-cooler cooling towers at coke by-product recovery plants.
[45CSR34, 40 C.F.R. §61.134(a)]

8.1.39. Each owner or operator of equipment in benzene service shall comply with the requirements of 40 C.F.R. Part 61 Subpart V, except as provided in Sections 8.1.39. – 8.1.46. [40 C.F.R. §61.135.].
[45CSR34, 40 C.F.R. §61.135(a)]

8.1.40. The provisions of §61.242-3 and §61.242-9 of subpart V do not apply to this subpart (i.e., 40 CFR 61 Subpart L).
[45CSR34, 40 C.F.R. §61.135(b)]

8.1.41. Each piece of equipment in benzene service to which 40 C.F.R. Part 61 Subpart L applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.
[45CSR34, 40 C.F.R. §61.135(c)]

8.1.42. Each exhauster shall be monitored quarterly to detect leaks by the methods specified in Section 8.3.4. [40 C.F.R. §61.245(b)] except as provided in Sections 8.2.3. and Sections 8.1.43-8.1.45 [40 C.F.R. §61.136(d) and 40 C.F.R. §§61.135(e) - (g)].

(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Section 8.1.93. and 8.1.94. [40 C.F.R. §§61.242-10(a) and (b)]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.135(d)]

8.1.43. Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of Section 8.1.42. [40 C.F.R. §61.135(d)] provided the following requirements are met:

(1) Each exhauster seal system is:

(i) Operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or

(ii) Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of Section 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11]; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere.

(2) The barrier fluid is not in benzene service.

(3) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(4) (i) Each sensor as described in Section 8.1.43.(3) [40 C.F.R. §61.135(e)(3)] shall be checked daily or shall be equipped with an audible alarm.

(ii) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(5) If the sensor indicates failure of the seal system, the barrier system, or both (based on the criterion determined under Section 8.1.43.(4)(ii) [40 C.F.R. §61.135(e)(4)(ii)], a leak is detected.

(6) (i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(ii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.135(e)]

8.1.44. An exhauster is exempt from the requirements of Section 8.1.42. [40 C.F.R. §61.135(d)] if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11] except as provided in Section 8.1.45. [40 C.F.R. §61.135(g)].
[45CSR34, 40 C.F.R. §61.135(f)]

8.1.45. Any exhauster that is designated, as described in Section 8.4.8. [40 C.F.R. §61.246(e)] for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Section 8.1.42. [40 C.F.R. §61.135(d)] if the exhauster:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in Section 8.3.5. [40 C.F.R. §61.245(c)]; and

(2) Is tested for compliance with Section 8.1.45.(1) [40 C.F.R. §61.135(g)(1)] initially upon designation, annually, and at other times requested by the Administrator.

[45CSR34, 40 C.F.R. §61.135(g)]

8.1.46. Any exhauster that is in vacuum service is excluded from the requirements of 40 C.F.R. Part 61 Subpart L if it is identified as required in Section 8.4.8.(5) [40 C.F.R. §61.246(e)(5)].
[45CSR34, 40 C.F.R. §61.135(h)]

8.1.47. Reserved

8.1.48. Reserved

8.1.49. Each owner or operator subject to the provisions of 40 C.F.R. Part 61 Subpart V shall demonstrate compliance with the requirements of Section 8.1.49. - 8.1.106. [40 C.F.R. §§61.242-1 to 61.242-11] for each new and existing source as required in 40 C.F.R. §61.05, except as provided in 40 C.F.R. §§61.243 and 61.244.
[45CSR34, 40 C.F.R. §61.242-1(a)]

8.1.50. Compliance with 40 C.F.R. Part 61 Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in Section 8.3.3. – 8.3.6. [40 C.F.R. §61.245].
[45CSR34, 40 C.F.R. §61.242-1(b)]

8.1.51. (1) An owner or operator may request a determination of alternative means of emission limitation to the requirements of Sections 8.1.54. – 8.1.60. [40 C.F.R. §61.242-2], Sections 8.1.73. – 8.1.92. [40 C.F.R. §§61.242-5, 61.242-6, 61.242-7, 61.242-8] and 40 C.F.R. §61.242-9, and Sections 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11] as provided in 40 C.F.R. §61.244.

(2) If the Administrator makes a determination that a means of emission limitation is at least a permissible alternative to the requirements of Sections 8.1.54. – 8.1.60. [40 C.F.R. §61.242-2], Sections 8.1.73. – 8.1.92. [40 C.F.R. §§61.242-5, 61.242-6, 61.242-7, 61.242-8] and 40 C.F.R. §61.242-9, and Sections 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11], an owner or operator shall comply with the requirements of that determination.

[45CSR34, 40 C.F.R. §61.242-1(c)]

8.1.52. Each piece of equipment to which 40 C.F.R. Part 61 Subpart V applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
[45CSR34, 40 C.F.R. §61.242-1(d)]

8.1.53. Equipment that is in vacuum service is excluded from the requirements of Section 8.1.54. to 8.1.106. [40 C.F.R. §61.242-2, to §61.242-11] if it is identified as required in Section 8.4.8.(5) [40 C.F.R. §61.246(e)(5)].
[45CSR34, 40 C.F.R. §61.242-1(e)]

8.1.54. (1) Each pump shall be monitored monthly to detect leaks by the methods specified in Section 8.3.4. [40 C.F.R. §61.245(b)], except as provided in Section 8.1.51. and Sections 8.1.57. – 8.1.59. [40 C.F.R. §61.242-1(c) and 40 C.F.R. §§63.242-2(d), (e), and (g)].

(2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

[45CSR34, 40 C.F.R. §61.242-2(a)]

8.1.55. For Pumps:

(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

[45CSR34, 40 C.F.R. §61.242-2(b)]

8.1.56. For Pumps:

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sections 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.242-2(c)]

8.1.57. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Section 8.1.54. and 8.1.55. [40 C.F.R. §§61.242-2(a) and (b)], provided the following requirements are met:

(1) Each dual mechanical seal system is:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Section 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11]; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.

(2) The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 C.F.R. Part 60, is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(i) If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in Section 8.3.3. – 8.3.6. [40 C.F.R. §61.245] to determine the presence of VOC and VHAP in the barrier fluid.

(ii) If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the owner or operator.

(iii) If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.

(5) Each sensor as described in Section 8.1.57.(3) [40 C.F.R. §61.242-2(d)(3)] is checked daily or is equipped with an audible alarm.

(6) (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

(ii) If indications of liquids dripping from the pump seal exceed the criteria established in Section 8.1.57.(6)(i) [40 C.F.R. §61.242-2(d)(6)(i)], or if, based on the criteria established in Section 8.1.57.(6)(i) [40 C.F.R. §61.242-2(d)(6)(i)], the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(iii) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(iv) A first attempt at repair shall be made no later than five calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.242-2(d)]

8.1.58. Any pump that is designated, as described in Section 8.4.8.(2) [40 C.F.R. §61.246(e)(2)], for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Section 8.1.54, 8.1.56, and 8.1.57. [40 C.F.R. §§61.242-2(a), (c), and (d)] if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 8.3.5. [40 C.F.R. §61.245(c)], and

(3) Is tested for compliance with Section 8.1.58.(2) [40 C.F.R. §61.242-2(e)(2)] initially upon designation, annually, and at other times requested by the Administrator.

[45CSR34, 40 C.F.R. §61.242-2(e)]

8.1.59. Any pump that is designated, as described in Section 8.4.9.(1) [40 C.F.R. §61.246(f)(1)], as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of Section 8.1.54. and Section 8.1.57.(4) through (6) [40 C.F.R. §61.242-2(a) and 40 C.F.R. §§61.242-2(d)(4) through (6)] if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with section 8.1.54. [40 C.F.R. §61.242-2(a)]; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 8.1.56. [40 C.F.R. §61.242-2(c)]; if a leak is detected.

[45CSR34, 40 C.F.R. §61.242-2(g)]

8.1.60. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Sections 8.1.54.(2) and 8.1.57.(4) [40 C.F.R. §§61.242-2(a)(2) and (d)(4)], and the daily requirements of Section 8.1.57.(5) [40 C.F.R. §§61.242-2(d)(5)], provided that each pump is visually inspected as often as practicable and at least monthly.
[45CSR34, 40 C.F.R. §61.242-2(h)]

8.1.61. Reserved.

8.1.62. Reserved.

8.1.63. Reserved.

8.1.64. Reserved.

8.1.65. Reserved.

8.1.66. Reserved.

8.1.67. Reserved.

8.1.68. Reserved.

8.1.69. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 8.3.5. [40 C.F.R. §61.245(c)].
[45CSR34, 40 C.F.R. §61.242-4(a)]

8.1.70. (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 8.3.5. [40 C.F.R. §61.245(c)].

[45CSR34, 40 C.F.R. §61.242-4(b)]

8.1.71. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section 8.1.98. - 8.1.106. [40 C.F.R. §61.242-11] is exempt from the requirements of Section 8.1.69. and 8.1.70. [40 C.F.R. §§61.242-4(a) and (b)].
[45CSR34, 40 C.F.R. §61.242-4(c)]

8.1.72. (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Section 8.1.69. and 8.1.70. [40 C.F.R. §§61.242-4(a) and (b)], provided the owner or operator complies with the requirements in Section 8.1.72.(2) [40 C.F.R. §61.242-4(d)(2)].

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R §61.242-10].

[45CSR34, 40 C.F.R. §61.242-4(d)]

8.1.73. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in Section 8.1.51. [40 C.F.R. §61.242-1(c)]. Gases displaced during filling of the sample container are not required to be collected or captured.
[45CSR34, 40 C.F.R. §61.242-5(a)]

8.1.74. Each closed-purge, closed-loop, or closed vent system as required in Section 8.1.73. [40 C.F.R. §61.242-5(a)] shall comply with the requirements specified in Sections 8.1.74.(1) - (4) [40 C.F.R. §§61.242-5(b)(1) - (4)]:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of Section 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11]; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(i) A waste management unit as defined in 40 C.F.R. §63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 C.F.R. Part 63 Subpart G, applicable to Group 1 wastewater streams; or

(ii) A treatment, storage, or disposal facility subject to regulation under 40 C.F.R. Part 262, 264, 265, or 266; or

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 C.F.R. Part 261.

[45CSR34, 40 C.F.R. §61.242-5(b)]

8.1.75. In-situ sampling systems and sampling systems without purges are exempt from the requirements of Section 8.1.73. and 8.1.74. [40 C.F.R. §§61.242-5(a) and (b)].
[45CSR34, 40 C.F.R. §61.242-5(c)]

8.1.76. (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in Section 8.1.51. [40 C.F.R. §61.242-1(c)].

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

[45CSR34, 40 C.F.R. §61.242-6(a)]

8.1.77. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
[45CSR34, 40 C.F.R. §61.242-6(b)]

8.1.78. For open-ended valves, when a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Section 8.1.76. [40 C.F.R. §61.242-6(a)] at all other times.
[45CSR34, 40 C.F.R. §61.242-6(c)]

8.1.79. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of Sections 8.1.76., 8.1.77., and 8.1.78. [40 C.F.R. §§61.242-6(a), (b) and (c)].
[45CSR34, 40 C.F.R. §61.242-6(d)]

8.1.80. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Sections 8.1.76., 8.1.77., and 8.1.78. [40 C.F.R. §§61.242-6(a), (b) and (c)] are exempt from the requirements of Sections 8.1.76., 8.1.77., and 8.1.78. [40 C.F.R. §§61.242-6(a), (b) and (c)].
[45CSR34, 40 C.F.R. §61.242-6(e)]

8.1.81. Each valve shall be monitored monthly to detect leaks by the method specified in Section 8.1.74. [40 C.F.R. §61.245(b)] and shall comply with Section 8.1.82. – 8.1.85. [40 C.F.R. §§61.242-7(b)-(e)], except as provided in Section 8.1.86., 8.1.87., and 8.1.88. [40 C.F.R. §§61.242-7(f), (g) and (h)], 40 C.F.R. §61.243-1 or Section 8.1.51. [40 C.F.R. §61.242-1(c)] and 40 C.F.R. §61.243-2.
[45CSR34, 40 C.F.R. §61.242-7(a)]

8.1.82. For valves, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. **[45CSR34, 40 C.F.R. §61.242-7(b)]**

8.1.83. (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

[45CSR34, 40 C.F.R. §61.242-7(c)]

8.1.84. For valves:

(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.242-7(d)]

8.1.85. For valves, first attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts; and

(4) Injection of lubricant into lubricated packing.

[45CSR34, 40 C.F.R. §61.242-7(e)]

8.1.86. Any valve that is designated, as described in Section 8.4.8.(2) [40 C.F.R. §61.246(e)(2)], for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Section 8.1.81. [40 C.F.R. §61.242-7(a)] if the valve:

(1) Has no external actuating mechanism in contact with the process fluid;

(2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in Section 8.3.5. [40 C.F.R. §61.245(c)]; and

(3) Is tested for compliance with Section 8.1.86.(2) [40 C.F.R. §61.242-7(f)(2)] initially upon designation, annually, and at other times requested by the Administrator.

[45CSR34, 40 C.F.R. §61.242-7(f)]

8.1.87. Any valve that is designated, as described in Section 8.4.9.(1) [40 C.F.R. §61.246(f)(1)], as an unsafe-to-monitor valve is exempt from the requirements of Section 8.1.81. [40 C.F.R. §61.242-7(a)] if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Section 8.1.81. [40 C.F.R. §61.242-7(a)]; and

(2) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

[45CSR34, 40 C.F.R. §61.242-7(g)]

8.1.88. Any valve that is designated, as described in Section 8.4.9.(2) [40 C.F.R. §61.246(f)(2)], as a difficult-to-monitor valve is exempt from the requirements of Section 8.1.81. [40 C.F.R. §61.242-7(a)] if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

(2) The process unit within which the valve is located is an existing process unit; and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

[45CSR34, 40 C.F.R. §61.242-7(h)]

8.1.89. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the owner or operator shall follow either one of the following procedures, except as provided in Section 8.1.51. [40 C.F.R. §61.242-1(c)]:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in Section 8.3.4. [40 C.F.R. §61.245(b)] and shall comply with the requirements of Section 8.1.90 through 8.1.92. [40 C.F.R. §§61.242-8(b) through (d)].

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

[45CSR34, 40 C.F.R. §61.242-8(a)]

8.1.90. For pressure relief services in liquid services and connectors, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
[45CSR34, 40 C.F.R. §61.242-8(b)]

8.1.91. For pressure relief services in liquid services and connectors:

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 8.1.93. – 8.1.97. [40 C.F.R. §61.242-10].

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[45CSR34, 40 C.F.R. §61.242-8(c)]

8.1.92. For pressure relief services in liquid services and connectors, first attempts at repair include, but are not limited to, the best practices described under Section 8.1.85. [40 C.F.R. §61.242-7(e)].
[45CSR34, 40 C.F.R. §61.242-8(d)]

8.1.93. Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
[45CSR34, 40 C.F.R. §61.242-10(a)]

8.1.94. Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.
[45CSR34, 40 C.F.R. §61.242-10(b)]

8.1.95. Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11].

[45CSR34, 40 C.F.R. §61.242-10(c)]

8.1.96. Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

[45CSR34, 40 C.F.R. §61.242-10(d)]

8.1.97. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
[45CSR34, 40 C.F.R. §61.242-10(e)]

8.1.98. Owners or operators of closed-vent systems and control devices used to comply with provisions of 40 C.F.R. Part 61 Subpart V shall comply with the provisions of Sections 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11], except as provided in Section 8.1.51. [40 C.F.R. §61.242-1(c)]. The control devices shall be monitored to ensure that they are operated and maintained in conformance with their design.
[45CSR34, 40 C.F.R. §§61.242-11(a) and (e)]

8.1.99. Except as provided in Section 8.1.102. through 8.1.104. [40 C.F.R. §§61.242-11(i) through (k)], each closed vent system shall be inspected according to the procedures and schedule specified in Section 8.1.99.(1) [40 C.F.R. §61.242-11(f)(1)] or 40 C.F.R. §61.242-11(f)(2), as applicable.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the following requirements:

(i) Conduct an initial inspection according to the procedures in Section 8.3.4. [40 C.F.R. §61.245(b)]; and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

[45CSR34, 40 C.F.R. §61.242-11(f)]

8.1.100. For closed vent systems and control devices: Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in Section 8.1.101. [40 C.F.R. §61.242-11(h)].

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

[45CSR34, 40 C.F.R. §61.242-11(g)]

8.1.101. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
[45CSR34, 40 C.F.R. §61.242-11(h)]

8.1.102. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of Section 8.1.99.(1)(i) [40 C.F.R. §61.242-11(f)(1)(i)] and 40 C.F.R. §61.242-11(f)(2).
[45CSR34, 40 C.F.R. §61.242-11(i)]

8.1.103. Any parts of the closed vent system that are designated, as described in Section 8.1.105.(1) [40 C.F.R. §61.242-11(l)], as unsafe-to-inspect are exempt from the inspection requirements of Section 8.1.99.(1)(i) [40 C.F.R. §61.242-11(f)(1)(i)] and 40 C.F.R. §61.242-11(f)(2) if they comply with the following requirements:

(1) The owner or operator determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Section 8.1.99.(1)(i) [40 C.F.R. §61.242-11(f)(1)(i)] or 40 C.F.R. §61.242-11(f)(2); and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

[45CSR34, 40 C.F.R. §61.242-11(j)]

8.1.104. Any parts of the closed vent system that are designated, as described in Section 8.1.105.(2) [40 C.F.R. §61.242-11(l)(2)], as difficult-to-inspect are exempt from the inspection requirements of Section

8.1.99.(1)(i) [40 C.F.R. §61.242-11(f)(1)(i)] and 40 C.F.R. §61.242-11(f)(2) if they comply with the following requirements:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

[45CSR34, 40 C.F.R. §61.242-11(k)]

8.1.105. For closed vent systems and control devices, the owner or operator shall record the following information:

(1) Identification of all parts of the closed vent system that are designated as unsafe-to-inspect, an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult-to-inspect, an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in Section 8.4.6. [40 C.F.R. §61.246(c)].

(4) For each inspection conducted in accordance with Section 8.3.4. [40 C.F.R. §61.245(b)] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with Section 8.1.99.(1)(ii) [40 C.F.R. §61.242-11(f)(1)(ii)] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

[45CSR34, 40 C.F.R. §61.242-11(l)]

8.1.106. Closed vent systems and control devices used to comply with provisions of 40 C.F.R. Part 61 Subpart V shall be operated at all times when emissions may be vented to them.
[45CSR34, 40 C.F.R. §61.242-11(m)]

8.1.107. Alternative standards for valves in VHAP service—allowable percentage of valves leaking.

(a) An owner or operator may elect to have all valves within a process unit to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator decides to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §61.247(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in acordance with §61.242-7(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in §61.245(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.

(d) Owner or operators who elect to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent.

(e) If an owner or operator decides no longer to comply with §61.243-1, the owner or operator must notify the Administrator in writing that the work practice standard described in §61.242-7(a)-(e) will be followed.

[45CSR34, 40 C.F.R. §61.243-1]

8.1.108. Alternative standards for valves in VHAP service—skip period leak detection and repair.

(a) (1) An owner or operator may elect for all valves within a process unit to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §61.247(d).

(b) (1) An owner or operator shall comply initially with the requirements for valves, as described in §61.242-7.

(2) After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.

(4) If the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §61.242-7 but may again elect to use this section.

[45CSR34, 40 C.F.R. §61.243-2]

8.1.109. An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of 40 C.F.R. §§61.342(b) and (c). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

(1) Wastes that are exempted from control under 40 C.F.R §§61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(2) The benzene in a material subject to 40 C.F.R. Part 61 Subpart FF that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

(3) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, is not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of 40 C.F.R §§61.342(c) through (h). If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(4) The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in Section 8.3.9.(1)(i)(A) through (C) [40 CF.R. §61.355(c)(1)(i)(A) through (C)].

[45CSR34, 40 C.F.R. §61.342(a)]

8.1.110. Compliance with 40 C.F.R. Part 61 Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in Sections 8.3.7. – 8.3.9. [40 C.F.R. §61.355] of 40 C.F.R. Part 61 Subpart FF.
[45CSR34, 40 C.F.R. §61.342(g)]

8.1.111. Permission to use an alternative means of compliance to meet the requirements of 40 C.F.R. §§61.342 through 61.352 of 40 C.F.R. Part 61 Subpart FF may be granted by the Administrator as provided in 40 C.F.R. §61.353 of 40 C.F.R. Part 61 Subpart FF.
[45CSR34, 40 C.F.R. §61.342(h)]

8.2. Monitoring Requirements

8.2.1. Each owner or operator subject to the provisions of 40 C.F.R. Part 61 Subpart L shall demonstrate compliance with the requirements of Sections 8.1.30. - 8.1.39, 8.1.41. – 8.1.46. [40 C.F.R. §§61.132.

through 61.135] for each new and existing source, except as provided under 40 C.F.R §§61.243-1. and 61.243-2.
[45CSR34, 40 C.F.R. §61.136(a)]

8.2.2. Compliance with 40 C.F.R. Part 61 Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in Sections 8.3.1. – 8.3.2. [40 C.F.R. §61.137.].
[45CSR34, 40 C.F.R. §61.136(b)]

8.2.3. (1) An owner or operator may request permission to use an alternative means of emission limitation to meet the requirements in Sections 8.1.30. - 8.1.37. and 8.1.39. - 8.1.46. [40 C.F.R. §§61.132, 61.133, and 61.135] and Sections 8.1.54. - 8.1.60, 8.1.73. - 8.1.92., and 8.1.98. - 8.1.106. [40 C.F.R. §§61.242-2, -5, -6, -7, -8, and –11]. Permission to use an alternative means of emission limitation shall be requested as specified in 40 C.F.R. §61.12(d).

(2) When the Administrator evaluates requests for permission to use alternative means of emission limitation for sources subject to Sections 8.1.30. - 8.1.37. [40 C.F.R. §§61.132 and 61.133] (except tar decanters) the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent.

(3) For any requests for permission to use an alternative to the work practices required under Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135], the provisions of 40 C.F.R. §61.244(c) shall apply.

[45CSR34, 40 C.F.R. §61.136(d)]

8.3. Testing Requirements

8.3.1. Each owner or operator subject to the provisions of 40 C.F.R. Part 61 Subpart L shall comply with the requirements in Sections 8.3.3. – 8.3.6. [40 C.F.R. §61.245].
[45CSR34, 40 C.F.R. §61.137(a)]

8.3.2. To determine whether or not a piece of equipment is in benzene service, the methods in Section 8.3.6. [40 C.F.R. §61.245(d)] shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in Section 8.3.6. [40 C.F.R. §61.245(d)].
[45CSR34, 40 C.F.R. §61.137(b)]

8.3.3. Each owner or operator subject to the provisions of 40 C.F.R. Part 61 Subpart V shall comply with the test methods and procedures requirements provided in Sections 8.3.4, 8.3.5, and 8.3.6. [40 C.F.R. §§61.245(b), 61.245(c), and 61.245(d)]
[45CSR34, 40 C.F.R. §61.245(a)]

8.3.4. Monitoring, as required in Sections 8.1.54. - 8.1.106. [40 C.F.R. §61.242], 40 C.F.R. §61.243, 40 C.F.R. §61.244. and Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135], shall comply with the following requirements:

(1) Monitoring shall comply with Method 21 of 40 C.F.R. Part 60 Appendix A.

(2) The detection instrument shall meet the performance criteria of Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

[45CSR34, 40 C.F.R. §61.245(b)]

8.3.5. When equipment is tested for compliance with or monitored for no detectable emissions, the owner or operator shall comply with the following requirements:

(1) The requirements of Sections 8.3.4.(1) – (4) [40. C.F.R. §§61.245(b)(1) through (4)] shall apply.

(2) The background level shall be determined, as set forth in Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

[45CSR34, 40 C.F.R. §61.245(c)]

8.3.6. (1) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless an owner or operator demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in 40 C.F.R. §61.18) shall be used.

(2) (i) An owner or operator may use engineering judgment rather than the procedures in Section 8.3.6.(1) [40 C.F.R. §61.245(d)(1)] to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in Section 8.3.6.(1) [40 C.F.R. §61.245(d)(1)] shall be used to resolve the disagreement.

(ii) If an owner or operator determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in Section 8.3.6.(1) [40 C.F.R. §61.245(d)(1)].

(3) Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

[45CSR34, 40 C.F.R. §61.245(d)]

8.3.7. An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:

(1) For each waste stream subject to 40 C.F.R. Part 61 Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in Section 8.1.109. [40 C.F.R. §61.342(a)], the owner or operator shall:

(i) Determine the annual waste quantity for each waste stream using the procedures specified in Section 8.3.8. [40 C.F.R. §61.355(b)].

(ii) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in Section 8.3.9. [40 C.F.R. §61.355(c)].

(iii) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

(2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to Section 8.3.8.(4) [40 C.F.R. §61.355(b)(4)].

(4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:

(i) Comply with the recordkeeping requirements of Section 8.4.13. and 8.4.14. [40 C.F.R. §61.356] and reporting requirements of Sections 8.5.10. and 8.5.11. [40 C.F.R. §61.357]; and

(ii) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

(5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:

(i) Comply with the recordkeeping requirements of 8.4.13.and 8.4.14. [40 CFR §61.356] and reporting requirements of 8.5.10., 8.5.11., and 8.5.12. [40 CFR §61.357]; and

(ii) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

(6) The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in Section 8.3.8.(4). [40 CFR §61.355(b)(4)], shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with Sections 8.3.7. through 8.3.9. [40 CFR §§61.355(a) through (c)]. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

[45CSR34, 40 C.F.R. §61.355(a)]

8.3.8. For purposes of the calculation required by Section 8.3.7. [40 C.F.R. §61.355(a)], an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in Section 8.3.8.(1) – (4) [40 C.F.R. §61.355(b)(1), (2), (3), and (4)], by one of the methods given in Section 8.3.8. (5) – (7) [40 C.F.R. §§61.355(b)(5) through (7)].

(1) The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(2) The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of Sections 8.1.30. – 8.1.34, Sections 8.1.35. – 8.1.37, and Section 8.1.38. [40 C.F.R. §§61.132, 61.133, 61.134, or 61.139] shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(i) The transfer of wastes between units complying with the control requirements of 40 C.F.R. Part 61 Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system.

(ii) The ammonia still meets the definition of a sour water stripper in 40 C.F.R. §61.341.

(4) The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in Section 8.3.7.(1)(iii) [40 C.F.R. §61.355(a)(1)(iii)] for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under Section 8.5.10.(1) [40 C.F.R. §61.357(a)(1)], the owner or operator shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the owner or operator chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

(5) Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

(6) Use the maximum design capacity of the waste management unit; or

(7) Use measurements that are representative of maximum waste generation rates.

[45CSR34, 40 C.F.R. §61.355(b)]

8.3.9. For the purposes of the calculation required by Section 8.3.7. [40 C.F.R. §61.355(a)], an owner or operator shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in Section 8.3.9.(1) [40 C.F.R. §61.355(c)(1)], using either of the methods given in Section 8.3.9.(2) and (3) [40 C.F.R. §§61.355(c)(2) and (c)(3)].

(1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(i) The determination shall be made at the point of waste generation except for the specific cases given in Section 8.3.9.(1)(i)(A) through (D) [40 C.F.R. §§61.355(c)(1)(i)(A) through (D)].

(A) The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(B) The determination for wastes at coke by-product plants subject to and complying with the control requirements of Sections 8.1.30. – 8.1.34, Sections 8.1.35. – 8.1.37, and Section 8.1.38. [40 C.F.R. §§61.132, 61.133, 61.134, or 61.139] shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(*1*) The transfer of wastes between units complying with the control requirements of 40 C.F.R. Part 61 Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system.

(*2*) The ammonia still meets the definition of a sour water stripper in 40 C.F.R. §61.341.

(C) The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

(D) The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in Section 8.3.9.(2) or (3) [40 C.F.R. §61.355(c)(2) or (c)(3)]. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in Section 8.3.7.(1)(iii) [40 C.F.R. §61.355(a)(1)(iii)] for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(ii) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(iii) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination -- to reduce the benzene concentration.

(iv) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in Section 8.3.9.(1)(i)(A) through (D) [40 C.F.R. §§61.355(c)(1)(i)(A) through (D)].

(v) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

(2) *Knowledge of the waste.* The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When an owner or operator and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under Section 8.3.9.(3) [40 C.F.R. §61.355(c)(3)] shall be used to resolve the disagreement.

(3) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(i) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

(ii) For waste in enclosed pipes, the following procedures shall be used:

(A) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(B) A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(C) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(D) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(E) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(F) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 °C (50 °F).

(G) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(H) The sample containers shall immediately be cooled and maintained at a temperature below 10 °C (50 °F) for transfer to the laboratory.

(iii) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(A) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. §61.18);

(B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. §61.18);

(C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. §61.18);

(D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 C.F.R. §61.18);

(E) Method 602, Purgeable Aromatics, as described in 40 C.F.R. Part 136 Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(F) Method 624, Purgeables, as described in 40 C.F.R. Part 136 Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$\overline{C} = \frac{1}{Q_t} \times \sum_{i=1}^{n} (Q_i)(C_i)$$

Where:

$\overline{C}$ = Flow-weighted annual average benzene concentration for waste stream, ppmw.

Q_t = Total annual waste quantity for waste stream, kg/yr (lb/yr).

N = Number of waste samples (at least 3).

Q_i = Annual waste quantity for waste stream represented by Ci, kg/yr (lb/yr).

C_i = Measured concentration of benzene in waste sample i, ppmw.

[45CSR34, 40 C.F.R. §61.355(c)]

8.4. Recordkeeping Requirements

8.4.1. The following information pertaining to the design of control equipment installed to comply with Sections 8.1.30. – 8.1.38. [40 C.F.R. §§61.132 through 61.134] shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

[45CSR34, 40 C.F.R. §61.138(a)]

8.4.2. The following information pertaining to sources subject to Sections 8.1.30. – 8.1.34. [40 C.F.R. §61.132] and sources subject to Sections 8.1.35. – 8.1.37. [40 C.F.R. §61.133] shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

(1) The date of the inspection and the name of the inspector.

(2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.

(3) The presence of a leak, as measured using the method described in Section 8.3.5. [40 C.F.R. §61.245(c)]. The record shall include the date of attempted and actual repair and method of repair of the leak.

(4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[45CSR34, 40 C.F.R. §61.138(b)]

8.4.3. Each owner or operator of a source subject to Section 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135] shall comply with Sections 8.4.4. – 8.4.12. [40 C.F.R. §§61.246].
[45CSR34, 40 C.F.R. §61.138(c)]

8.4.4. (1) Each owner or operator subject to the provisions of 40 C.F.R. Part 61 Subpart V shall comply with the recordkeeping requirements of Sections 8.4.4. – 8.4.12. [40 C.F.R. §61.246].

(2) An owner or operator of more than one process unit subject to the provisions of 40 C.F.R. Part 61 Subpart V may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.

[45CSR34, 40 C.F.R. §61.246(a)]

8.4.5. When each leak is detected as specified in Sections 8.1.54. – 8.1.60. [40 C.F.R §§61.242-2], Sections 8.1.81. – 8.1.92. [40 C.F.R §§61.242-7 and 61.242-8], and Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R §61.135], the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Section 8.1.83. [40 C.F.R. §61.242-7(c)] and no leak has been detected during those 2 months.

(3) The identification on equipment, except on a valve, may be removed after it has been repaired.

[45CSR34, 40 C.F.R. §61.246(b)]

8.4.6. When each leak is detected as specified in Sections 8.1.54. – 8.1.60. [40 C.F.R §§61.242-2], Sections 8.1.81. – 8.1.92. [40 C.F.R §§61.242-7 and 61.242-8], and Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R §61.135], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in Section 8.3.3. [40 C.F.R. §61.245(a)] after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

[45CSR34, 40 C.F.R. §61.246(c)]

8.4.7. The following information pertaining to the design requirements for closed-vent systems and control devices described in Sections 8.1.98. – 8.1.106. [40 C.F.R. §61.242-11] shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 8.1.98 [40 CFR §61.242-11(e)], to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed-vent systems and control devices required in Sections 8.1.54. – 8.1.75. [40 C.F.R. §§61.242-2, 61.242-4, 61.242-5] and 40 C.F.R. §61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed-vent systems and control devices required in Sections 8.1.54. – 8.1.75. [40 C.F.R. §§61.242-2, 61.242-4, 61.242-5] and 40 C.F.R. §61.242-9.

[45CSR34, 40 C.F.R. §61.246(d)]

8.4.8. The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 C.F.R. Part 61 Subpart V.

(2) (i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.

(ii) The designation of this equipment for no detectable emissions shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Section 8.1.69. [40 C.F.R. §61.242-4(a)].

(4) (i) The dates of each compliance test required in Sections 8.1.58, 8.1.69. – 8.1.72, 8.1.86, and 8.1.45. [40 C.F.R. §§61.242-2(e), 61.242-4, 61.242-7(f), and 61.135(g)].

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

[45CSR34, 40 C.F.R. §61.246(e)]

8.4.9. The following information pertaining to all valves subject to the requirements of Sections 8.1.87. and 8.1.88. [40 C.F.R. §§61.242-7(g) and (h)] and to all pumps subject to the requirements of Sections 8.1.59. [40 C.F.R. §61.242-2(g)] shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

[45CSR34, 40 C.F.R. §61.246(f)]

8.4.10. The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in Sections 8.1.57.(5), and 8.1.43.(4) [40 C.F.R. §§61.242-2(d)(5) and 61.135(e)(4)] and an explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

[45CSR34, 40 C.F.R. §61.246(h)]

8.4.11. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 C.F.R. Part 61 Subpart V and other specific subparts:

(1) An analysis demonstrating the design capacity of the process unit, and

(2) An *analysis* demonstrating that equipment is not in VHAP service.

[45CSR34, 40 C.F.R. §61.246(i)]

8.4.12. Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.
[45CSR34, 40 C.F.R. §61.246(j)]

8.4.13. Each owner or operator of a facility subject to the provisions of 40 C.F.R. Part 61 Subpart FF shall comply with the recordkeeping requirements of Sections 8.4.13. – 8.4.14. [40 C.F.R. §61.356]. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.
[45CSR34, 40 C.F.R. §61.356(a)]

8.4.14. Each owner or operator shall maintain records that identify each waste stream at the facility subject to 40 C.F.R. Part 61 Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 C.F.R. Part 61 Subpart FF. In addition the owner or operator shall maintain the following records:

(1) For each waste stream not controlled for benzene emissions in accordance with 40 C.F.R. Part 61 Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(2) For each waste stream exempt from 40 C.F.R. §61.342(c)(1) in accordance with 40 C.F.R. §61.342(c)(3), the records shall include:

(i) All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 C.F.R. §61.342(c)(3)(i), or

(ii) All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 C.F.R. §61.342(c)(3)(ii).

(5) For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with Section 8.3.8.(5) [40 C.F.R. §61.355(b)(5)], the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with Section 8.3.8.(5) [40 C.F.R. §61.355(b)(5)], the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with Section 8.3.7.(1)(iii) [40 C.F.R. §61.355(a)(1)(iii)].

[45CSR34, 40 C.F.R. §61.356(b)]

8.5. Reporting Requirements

8.5.1. The permittee shall review and determine on a monthly basis if there were any exceedance of the conditions set forth under Sections 8.1.5. - 8.1.21. Should the permittee determine that an exceedance occurred, then the permittee shall submit a written report describing what the exceedance was and what measures the permittee has taken to prevent the exceedance from re-occurring.
[45CSR13, R13-1939, B.1., B.7.]

8.5.2. A report shall be submitted to the Administrator semiannually starting 6 months after the initial reports required in 40 C.F.R.§61.138(e) and 40 C.F.R §61.10, which includes the following information:

(1) For sources subject to Sections 8.1.30. – 8.1.34. [40 C.F.R. §61.132] and sources subject to Sections 8.1.35. – 8.1.37. [40 C.F.R. §61.133],

(i) A brief description of any visible defect in the source or ductwork,

(ii) The number of leaks detected and repaired, and

(iii) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

(2) For equipment in benzene service subject to Section 8.1.39. [40 C.F.R. §61.135(a)], information required by Section 8.5.7. [40 C.F.R. §61.247(b)].

(3) For each exhauster subject to Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135] for each quarter during the semiannual reporting period,

(i) The number of exhausters for which leaks were detected as described in Sections 8.1.42. and 8.1.43.(5) [40 C.F.R. §61.135(d) and (e)(5)],

(ii) The number of exhausters for which leaks were repaired as required in Sections 8.1.42. and 8.1.43.(6) [40 C.F.R. §61.135(d) and (e)(6)].

(iii) The results of performance tests to determine compliance with Section 8.1.45. [40 C.F.R. §61.135(g)] conducted within the semiannual reporting period.

(4) A statement signed by the owner or operator stating whether all provisions of 40 C.F.R. Part 61 Subpart L, have been fulfilled during the semiannual reporting period.

(6) Revisions to items reported according to 40 C.F.R. §61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.

Note:

Compliance with the requirements of 40 C.F.R. §61.10(c) is not required for revisions documented under Section 8.4.1. - 8.4.3. and 8.5.2-8.5.5. [40 C.F.R. §61.138].

[45CSR34, 40 C.F.R. §61.138(f)]

8.5.3. In the first report submitted as required in 40 C.F.R. §61.138(e), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.
[45CSR34, 40 C.F.R. §61.138(g)]

8.5.4. An owner or operator electing to comply with the provisions in Sections 8.1.107 and 8.1.108 [40 C.F.R. §§61.243-1 and 61.243-2] shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
[45CSR34, 40 C.F.R. §61.138(h)]

8.5.5. An application for approval of construction or modification, as required under 40 C.F.R. §§61.05(a) and 61.07, will not be required for sources subject to Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135] if:

(1) The new source complies with Sections 8.1.39, 8.1.41. - 8.1.46. [40 C.F.R. §61.135], and

(2) In the next semiannual report required by Section 8.5.2. [40 C.F.R. §61.138(f)], the information described in 40 C.F.R. §61.138(e)(4) is reported.

[45CSR34, 40 C.F.R. §61.138(i)]

8.5.6. The statement is to contain the following information for each source:

(i) Equipment identification number and process unit identification.

(ii) Type of equipment (for example, a pump or pipeline valve).

(iii) Percent by weight VHAP in the fluid at the equipment.

(iv) Process fluid state at the equipment (gas/vapor or liquid).

(v) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

[45CSR34, 40 C.F.R. §61.247(a)(5)]

8.5.7. A report shall be submitted to the Administrator semiannually starting 6 months after the initial report required in 40 C.F.R. §61.247(a), that includes the following information:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in Section 8.1.82. [40 C.F.R. §61.242-7(b)] of 40 C.F.R. §61.243-2.

(ii) Number of valves for which leaks were not repaired as required in Section 8.1.82. [40 C.F.R. §61.242-7(b)].

(iii) Number of pumps for which leaks were detected as described in Section 8.1.55. and 8.1.57. (6) [40 C.F.R. §61.242-2(b) and (d)(6)].

(iv) Number of pumps for which leaks were not repaired as required in Section 8.1.56. and 8.1.57.(6) [40 C.F.R. §61.242-2(c) and (d)(6)].

(vii) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to 40 C.F.R. §61.247(a)(1) if changes have occurred since the initial report or subsequent revisions to the initial report.

Note:

Compliance with the requirements of 40 C.F.R. §61.10(c) is not required for revisions documented under this Section 8.5.7. [40 C.F.R. §61.247(b)].

(5) The results of all performance tests and monitoring to determine compliance with no detectable emissions and with 40 C.F.R. §§61.243 - 1 and 61.243 - 2 conducted within the semiannual reporting period.

[45CSR34, 40 C.F.R. §61.247(b)]

8.5.8. In the first report submitted as required in 40 C.F.R. §61.247(a), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.
[45CSR34, 40 C.F.R. §61.247(c)]

8.5.9. An application for approval of construction or modification, 40 C.F.R. §§61.05(a) and 61.07, will not be required if --

(1) The new source complies with the standard, Sections 8.1.49. – 8.1.106. [40 C.F.R. §61.242];

(2) The new source is not part of the construction of a process unit; and

(3) In the next semiannual report required by Section 8.5.7. [40 C.F.R. §61.247(b)], the information in Section 8.5.6 [40 C.F.R. §61.247(a)(5)] is reported.

[45CSR34, 40 C.F.R. §61.247(e)]

8.5.10. Each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to Sections 8.1.49. through 8.1.106. [40 C.F.R. §61.342] and is determined by the procedures specified in Section 8.3.9. [40 C.F.R. §61.355(c)] to contain benzene. Each owner or operator subject to 40 C.F.R. Part 61 Subpart FF who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to 40 C.F.R. Part 61 Subpart L, the report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with Section 8.3.7. [40 C.F.R. §61.355(a)].

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 C.F.R. Part 61 Subpart FF.

(3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 C.F.R. Part 61 Subpart FF the following information shall be added to the table:

(i) Whether or not the water content of the waste stream is greater than 10 percent;

(ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(iii) Annual waste quantity for the waste stream;

(iv) Range of benzene concentrations for the waste stream;

(v) Annual average flow-weighted benzene concentration for the waste stream; and

(vi) Annual benzene quantity for the waste stream.

(4) The information required in Section 8.5.10.(1), (2), and (3) [40 C.F.R. §§61.357(a)(1), (2), and (3)] should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 C.F.R. §61.10(a).

[45CSR34, 40 C.F.R. §61.357(a)]

8.5.11. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
[45CSR34, 40 C.F.R. §61.357(b)]

8.5.12. If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in Section 8.5.10.(1) through (3) [40 C.F.R. §§61.357(a)(1) through (3)]. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by Sections 8.5.10.(1) through (3) [40 C.F.R. §§61.357(a)(1) through (a)(3)] is not changed in the following year, the owner or operator may submit a statement to that effect.
[45CSR34, 40 C.F.R. §61.357(c)]

8.6. Compliance Plan

8.6.1. None

9.0 Source-Specific Requirements [Emergency Air Compressor (E1), and Emergency Generators (E5, E6, E7), (Group 010), emission point ID(s) (S26, S6, E6 and E7)]

9.1. Limitations and Standards

9.1.1. The emergency backup air compressor shall be permanently installed emergency diesel-fired backup air compressor set (S26) with a maximum rating of 600 hp.
[45CSR13, R13-2632, 4.1.1.]

9.1.2. The emergency backup air compressor (S26) should be limited to a maximum operating schedule of 500 hours per year each in emergency situations and for routine testing and maintenance. Of this 500 hours, only 50 hours per year each can be used for non-emergency situations as defined in 40 C.F.R. §63.6675 (40 C.F.R. Part 63 Subpart ZZZZ).
[45CSR34, 40 C.F.R. §63.6675, 45CSR13, R13-2632, 4.1.2.]

9.1.3. The emergency backup air compressor S26 shall be limited to using a maximum of 18.2 gallons per hour and 9,100 gallons per year of #2 diesel fuel. Compliance with the annual fuel usage limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the fuel usage at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2632, 4.1.3.]

9.1.4. The emissions from the emergency backup air compressor (S26) shall not exceed the limits shown in the following table:

Emission Unit ID #	Pollutant	Annual Rate[1] tons/yr	Hourly Rate[2] lb/hr
E1	NO_x	2.49	9.99
	SO_2	0.03	0.1
	CO	0.18	0.71
	PM_{10}	0.03	0.12
	VOC	0.05	0.18
	Formaldehyde	0.00005	0.0002
	Total HAPs	0.009	0.036

1 - Annual emissions are based on a operating schedule of 500 hours per year.
2 - Hourly emission rates are determined using engine manufacture's information and US EPA emission factors (PM 0.07 grams/Kw-hr, CO 0.4 g/Kw-hr, SO_2 47.6 g/Kw-hr, Hc 0.10 g/kw-hr, and US EPA MACT document for HAP of 0.0359 lbs/hr operation, Formaldehyde 7.89E-05 lb/MM Btu.)

[45CSR13, R13-2632, 4.1.4.]

9.1.5. The following operating limits and conditions are specific to the construction of the Emergency Diesel Engine-powered Generator (S6):

(1) The generator shall be powered by a diesel engine with a maximum output rating of 527 horsepower (350 kilowatts).

(2) The maximum fuel consumption rate of the generator shall be limited to 24.7 gallons per hour and 12,350 gallons per year.

(3) The maximum annual operating schedule of the generator shall not exceed 500 hours per year.

(4) The emissions from E5 shall be vented through Emission Point S6.

[45CSR13, R13-2591, 4.1.9.]

9.1.6. Compliance with all annual operating limits set forth in Section 9.1.2., 9.1.3., and 9.1.4. shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the amount of hours operated at any given time during the previous twelve (12) consecutive calendar months.
[45CSR13, R13-2632, 4.1.6.]

9.1.7. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2632 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[**45CSR13, R13-2632, 2.5.1.]**

9.1.8. For emergency generator engines E6 and E7: You must comply with the following requirements at all times[1]

a. You must operate and maintain the engines and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

b. You must install a non-resettable hour meter if one is not already installed.

c. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2]

d. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

e. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]

f. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

---

[1] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2] Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement in Table 2c of 40 CFR 63 Subpart ZZZZ.

[3] Sources can petition the Administrator pursuant to the requirements of 40 CFR §63.6(g) for alternative work practices.

[45CSR34; 40 CFR §§63.6605(a), 63.6625(e)(2), (f), (h) & (i), 63.6602 and 63.6640(a); 40 CFR 63 Subpart ZZZZ Table 2c Item 1 and Table 6 Item 9]

9.1.9. At all times you must operate and maintain any affected source (i.e., E1, E5, E6, E7), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40 CFR §63.6605(b)]

9.1.10. <u>The following requirements from 40 CFR 63 Subpart ZZZZ, §63.6640(f) are applicable to the emergency generator engines E5, E6, and E7) and emergency air compressor engine E1:</u>

If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
(*Note – Any limit contained in 45CSR13, Permits R13-2632 and R13-2591 still apply*)

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34; 40 CFR §63.6640(f)]

9.2. Monitoring Requirements

9.2.1. Reserved

9.3. Testing Requirements

9.3.1. Reserved

9.4. Recordkeeping Requirements

9.4.1. For the purpose of demonstrating compliance with the hours of operation set forth in Sections 9.1.2. and 9.1.5.(3), the permittee shall maintain accurate records of operating hours of the emergency backup air compressor (S26) and emergency generator (S6). Said records shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2632, 4.4.3., 45CSR§30-5.1.c.]

9.4.2. For the purpose of demonstrating compliance with the fuel usage limits set forth in Sections 9.1.3. and 9.1.5.(2), the permittee shall maintain accurate records of fuel usage of the emergency backup air compressor (S26) and emergency generator (S6). Said records shall be maintained in accordance with Section 3.4.2.
[45CSR13, R13-2632, 4.4.4., 45CSR§30-5.1.c]

9.4.3. For emergency generator engines E6 and E7, records must be kept as described below:

a. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
[45CSR34; 40 CFR §63.6655(a)(1)]

b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
[45CSR34; 40 CFR §63.6655(a)(2)]

c. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
[45CSR34; 40 CFR §63.6655(a)(5)]

d. You must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each operating limitation that applies to you.
[45CSR34; 40 CFR §63.6655(d)]

e. You must keep records of the maintenance conducted on the emergency generator engines E6 and E7 in order to demonstrate that you operated and maintained the engines according to your own maintenance plan.
[45CSR34; 40 CFR §63.6655(e)]

f. You must keep records of the hours of operation of emergency generator engines "E6" and "E7" that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
[45CSR34; 40 CFR §63.6655(f)]

g. Records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
[45CSR34; 40 CFR §63.6660(a)]

h. As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
[45CSR34; 40 CFR §63.6660(b)]

i. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).
[45CSR34; 40 CFR §63.6660(c)]

9.5. Reporting Requirements

9.5.1. For emergency generator engines E6 and E7, you must report each instance in which you did not meet each requirement in Table 2c, to 40 CFR 63 Subpart ZZZZ for existing compression ignition stationary RICE located at a major source of HAP emissions that apply to you. (*The Table 2c requirements for E6 and E7 pertain to routine maintenance and repair and startup operations and are listed in condition 9.1.8. of this permit*). These instances are deviations from 40 CFR 63 Subpart ZZZZ and must be reported according to the requirements in 40 CFR §63.6650 (i.e., in the semiannual monitoring report required by condition 3.5.6.).
[45CSR34; 40 CFR §§63.6640(b) and 63.6650(f)]

9.5.2. For emergency generator engines E6 and E7, you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you.
[45CSR34; 40 CFR §63.6640(e)]

9.6. Compliance Plan

9.6.1. None

APPENDIX A

1. **Facility Information**
2. **Applicability Determination 45 CSR2 and 45 CSR 2A**
3. **Applicability Determination 45 CSR10**
4. **Applicability Determination 45 CSR10A**

Attachment 1

Facility Information:

Facility Name: *Mountain State Carbon LLC*

Facility Address: *1851 Main Street, Follansbee, West Virginia*

Facility Contact: *(304) 527-5632*
Manager, Environmental Control

A.

Facility Description:

The Mountain State Carbon Coke Facility is located approximately one mile north of Follansbee, Brooke County, West Virginia on West Virginia Route 2. The facility occupies approximately 88.5 acres along the eastern bank of the Ohio River. The facility is bordered to the west by Koppers Industries, Inc. and the Ohio River, to the south by Trimodal Transport, LLC, the City of Follansbee and Wheeling-Nisshin Steel, and to the north by Mahan Run. West Virginia Route 2 serves as the eastern boundary for operating portions of the Follansbee facility. Permittee owns and uses property east of Route 2 for employee parking.

Past and current operations performed at the Follansbee facility include the production of metallurgical-grade coke, coke gas byproducts (light oil, ammonium sulfate, fuel gas, coal tar, sulfuric acid). Currently four coke oven batteries produce coke and five gas fired boilers are operated to provide steam.

45 CSR 2 and 45CSR 2A
Applicability Determination
Fuel Burning Units

I. 45 CSR 2-8.2. Monitoring Plan:

Does not apply to our facility per 45 CSR 2 Section 8.4.c. (units design heat input are less than 100mmBtu/hr).

II. 45 CSR 2A-4. Registration of Allowable Emission Rates for Individual Stacks

Appropriatly complete Appendix C is attached to register the allowable emission rate for each stack.

III. 45 CSR 2A-5. Testing Requirements

Does not apply to our facility per 45 CSR 2A Section 3.1.b. (units design heat input are less than 100mmBtu/hr).

IV. 45 CSR 2A-6. Visible Emission Monitoring Plan Requirements

Does not apply to our facility per 45 CSR 2A Section 3.1.b. (units design heat input are less than 100mmBtu/hr).

V. 45 CSR 2A-7. Record-keeping and Reporting Requirements.

Permittee shall maintain records of operating schedule date and time of startup and shutdown and the quality and quantity of coke oven gas and natural gas combusted in Boilers 6, 7, 9 and 10 and the date and time of startup and shutdown and quality of natural gas combusted in Boiler No.8.

Attachment 2

45 CSR 10
Applicability Determinations and Responses
Excess coke oven gas flare

1. **45-CSR10, §5. Combustion of Refinery or Process Gas Streams.**
   a. **45-CSR10, §5.1.** No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and USEPA.

      Permittee combust excess coke oven gas that contains H_2S.

   b. **45-CSR10, §5.4.** Compliance with the allowable hydrogen sulfide concentration limitations for combustion sources set forth in this rule shall be based on a block three (3) hour averaging time.

      Permittee maintains a computerized data management system for calculating three-hour averages.

2. **45-CSR10, §6. Registration**
   a. Within thirty (30) days after the effective day of this rule all persons owning and/or operating a sources(s) of sulfur dioxide subject to this rule and not previously registered shall have registered such source(s) with the Director.

      Completed registration form was attached with our initial plan submission dated February 27, 2001.

3. **45-CSR10, §8. Testing, Monitoring, Recordkeeping and Reporting**

   a. **45-CSR10, §8.2.c.** The owner or operator of fuel burning units(s), manufacturing process sources(s) or combustion source(s) shall demonstrate compliance with sections 3., 4. and 5. of this rule by testing and or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring system (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

      Fuel sampling and monitoring plan is attached.

b. **45-CSR10, §8.3.a.** The owner or operator of fuel burning units(s), manufacturing process source(s) or combustion source(s) subject to sections 3., 4. or 5. shall maintain on-site a record of all required monitoring data as established in a monitor plan pursuant to subdivision 8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

Appropriate records are maintained on-site and are available for review.

c. **45-CSR10, §8.3.b.** the owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director….

Permittee currently submits a monthly exception report providing the specified information.

d. **45-CSR10, §8.3.c.** The owner or operator of fuel burning unit(s) or combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

No shut down of the coke oven gas flare is anticipated, therefore the operating schedule will be 24 hours per day 365 days per year. The facility currently maintains daily records of the quantity of coke oven gas flared and the H_2S content of coke oven gas flare.

Attachment 3

45 CSR 10A
Applicability Determinations and Responses
Excess coke oven gas flare

1. **45-CSR10A, §5. Testing Requirements.**

   Exempt from testing per section 5.2.b of 45CSR10A

2. **45-CSR10A, §6. Monitoring Plan Requirements.**

   a. **45-CSR10A, §6.3.a.** The owner or operator of a combustion source(s) shall submit, to the Director for approval, a monitoring plan for each combustion source(s) that describes the method the owner or operator will use to monitor compliance with the standard set forth in section 5. of 45 CSR10. The owner or operator of a combustion source(s) may use CEMS, which shall be deemed to satisfy all of the requirements of an approved monitoring plan, or a monitoring plan as specified in subsection 6.4, in accordance with the provisions of this section.

      Permittee maintains and employs existing redundant monitoring devices and data logging system to detect continuously and record hourly and three-hour rolling averages of the H_2S concentration in the coke oven gas as required by Consent Decree: Civil Action NO. 5:93CV195.

   b. **45-CSR10A,** §**6.3.b.** The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan.

      Permittee maintains and employs a coke oven gas desulfurization system to remove hydrogen sulfide from the coke oven gas. The average concentration of H_2S is less than 45 grains per 100 cubic feet of coke oven gas.

   c. **45-CSR10A, §6.3.b.1.** "The owner or operator of a combustion source may for good cause petition the Director for an alternative to CEMS".

      In response to this rule permittee request that the Director approve the use of the existing continuous monitoring system. Details are provided below to address the items required by 45 CSR 10 A Section 6.4.

   d. **45-CSR10A, §6.4.** An approved non-CEM monitoring plan shall contain, at a minimum, the following items:

- **45-CSR10A, §6.4.a;** a list of parameters to be monitored

  H_2S content of coke oven gas and the quantity of coke oven gas combusted.

- **45-CSR10A, §6.4.b;** the monitoring method and frequency for each parameter to be monitored:

  The H_2S content of the coke oven gas is monitored continuously using redundant sensors and saved electronically as hourly average.

- **45-CSR10A, §6.4.c;** the compliance range for each parameter to be monitored

  The monitoring system is capable of detecting concentration of H_2S in the coke oven gas from single digits to 500 grains per 100 scf.

- **45-CSR10A, §6.4.d;** an explanation of how the parameters to be monitored were chosen, and how they are indicative of compliance:

  The monitoring system is designed and operated to provide direct measurement of the coke oven gas constituent that is regulated by the rule (H_2S).

- **45-CSR10A, §6.4.e;** an explanation of how the compliance ranges were established:

  The monitoring system is capable of providing direct determination of H_2S content of both un-desulfurized and desulfurized coke oven gas in grains of H_2S per 100scf .

- **45-CSR10A, §6.4.f;** a schedule for installation and operation of any additional monitoring equipment installed for purposes of complying with this rule:

  No additional devices are required.

- **45-CSR10A, §6.4.g;** a response plan to be implemented during excursions:

  The operators of the coke oven gas desulfurization system reference the Davy/Still Otto document titled "M-7125 Operating Manual WPSC By-Products Plant Follansbee, WV" for trouble shooting coke oven gas desulfurization system malfunction.

- **45-CSR10A, §6.4.h.** a proposed compliance testing schedule for manufacturing process source(s) and combustion source(s):

Exempt from testing per section 5.2.b of 45CSR10A

3. 45-CSR10A, §7. Record-Keeping and Reporting Requirements.

a. **45-CSR10A, §7.1.b** the owner or operator of a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit. Such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis, and a periodic fuel quality analysis. The frequency of periodic fuel quality analysis shall be established in an approved monitoring plan.

Permittee will continue to maintain daily records of the operating schedule and the quality and quantity of fuel consumed by the flare.

b. **45-CSR10A, §7.1.d** for fuel burning units, manufacturing process sources, and combustion sources, records of all required monitoring data as established in an approved monitoring plan and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

The appropriate records are maintained on site for 5 years from date of monitoring, sampling, measurement or reporting.

c. ***45-CSR10A, §7.2.b*** each owner or operator employing monitoring pursuant to subsection 6.4. shall submit a "Monitoring Summary Report" and an "Excursion and Monitoring Plan Performance Report" to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All report shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The Monitoring Summary Report shall contain the information and be in a format approved by the Director.

Permittee currently submits a monthly "Monitoring Summary Report" that provides the excursions of the standard, corrective actions, monitor maintenance and hourly concentrations of H_2S. A "Excursion and Monitoring System Performance Report" providing the specified information will be submitted within 30 days after each calendar quarter.

APPENDIX B

B1	**Compliance Determination for Full Enclosures as a Control Device**
B2	**Compliance Determination for Unpaved Roads and Areas**
Form B-1 (1)	**ENCLOSURE INSPECTION FORM**
Form B-2 (3)	**Example Chemical Suppressant Application Log**
B3	**Compliance Determination for Paved Roads and Areas**

B1 Compliance Determination for Full Enclosures as a Control Device

Compliance with the provisions of this Consent Order, specifically Section III.1, Coal Crushing/Crusher and Section III.2, Coke Sizing and Screening Stations No. 1 shall be based on in-plant inspections by Agency personnel in a manner specified herein. Said inspections shall be conducted at a minimum, once per year and shall consist of the following:

1. The inspector will physically inspect the above cited process operations and related enclosures and record opacity observations, which shall not be averaged, for an appropriate period of time. In conjunction with the observations, the inspector will provide the information requested in form B-1(1) (attached) for each of the three process operations and enclosures.

The inspector will compile a narrative report attaching Form B-1(1) and his opacity observations with any recommendations and submit such to the Director.

Form B-1(1)

ENCLOSURE INSPECTION FORM

Name of company: _____
Mailing address : _____
Plant address : _____
Phone number : _____
Plant contact : _____
Inspector/Title : _____
Date : ____/____/_____
Process name : _____
Location : _____
Description : _____

ENCLOSURE INSPECTION/OBSERVATIONS

1. Is process still in operation?
2. Are there changes in process?
3. Does enclosure still exist?
4. Are there any cracks, splits or openings at the enclosure?
5. Are there any observable emissions from the enclosure? Describe.
6. Have repairs been performed on the enclosure? Describe.
7. Have there been any changes or alterations to the enclosure?
8. Is the enclosure judged to be compliant with the consent order?
9. Additional comments/observations:

Signed : _____

Title : _____

Date : _____

B2 Compliance Determination for Unpaved Roads and Areas

Information contained herein is taken from the document Inspection Manual for PM_{10} Emissions from Paved/Unpaved Roads and Storage Piles authored by Midwest Research Institute for the USEPA (Contract No. 68-02-4463) October 27, 1989.

Compliance with the provisions of the Consent Order, specifically Section 7.1.1. through 7.1.5. (Section III.5). Unpaved plant roads, parking lots, laydown, entrance, unloading areas and berms - chemical suppression shall be determined by assessment and evaluation of the Company's quarterly reports as required by Section 7.4.1., 7.4.2., 7.5.1., and 7.5.2. (Section III.5.E.) of the Consent Order. In addition, compliance shall also be determined by a qualitative and/or quantitative assessment of the specified control program by agency personnel as provided herein.

B3 Compliance Determination for Paved Roads and Areas

Information contained herein is taken from the document Inspection Manual for PM_{10} Emissions from Paved/Unpaved Roads and Storage Piles authored by Midwest Research Institute for the USEPA (contract No. 68-02-4463) October 27, 1989.

Compliance with the provisions of the Consent Order specifically Section III.6. Paved Roads - Flushing and Vacuum Sweeping shall be determined by assessment/evaluation of the company's quarterly reports as required by Sections 7.4.2. through 7.4.3. (Section III.6.D.) of the Consent Order.

APPENDIX C

Table 1 - Unpaved Roads and Areas

Table 2 - Paved Roads

Table 1 - Unpaved Roads and Areas

Source Type	Road/Area Segments	Application Frequency
Unpaved Roads	D, E, F, L	Every three (3) weeks
Unpaved parking lots	G, K, T, W	Once every month
Unpaved laydown entrance and unloading areas	H, J, P, Q, R	Once every quarter
Unpaved berms of paved roads	Berms at road I	Once every quarter
Unpaved berms of unpaved roads	Berms at road O	Once every quarter

Table 2 - Paved Roads

Source Type	Road Segments	Flushing and Vacuum Sweeping Frequency
Paved Roads	A, B, C, I, V	Once per day Seven days per week

APPENDIX D

R13-2798

MONTHLY/QUARTERLY OPACITY REPORT

Date of Observation:
Date Entered by:
Reviewed by:
Date Reviewed:
General Weather Conditions:

Emission Point ID	Description of Emission Point	Time of Observation	Visible Emissions (Yes/No)	Consecutive Months of Visible Emission	Comments

ICI BOILERS – NATURAL GAS

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Arcelor Mittal

54-029-00001

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West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

ArcelorMittal Weirton LLC

R30-02900001-2017

William F. Durham

Director

Issued: April 5, 2017 • Effective: April 19, 2017
Expiration: April 5, 2022 • Renewal Application Due: October 5, 2021

Permit Number: **R30-02900001-2017**
Permittee: **ArcelorMittal Weirton LLC**
Permittee Mailing Address: **100 Pennsylvania Avenue, Weirton, WV 26062**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Weirton, Hancock County, West Virginia
Telephone Number: 304-797-3908
Type of Business Entity: LLC
Facility Description: Steel Mill
SIC Codes: 3312; 2813
UTM Coordinates: 533.70 km Easting • 4474.50 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 6

3.0. Facility-Wide Requirements and Permit Shield 14

Source-specific Requirements

4.0. Indirect Fired Combustion Source Requirements 20

5.0. Manufacturing Process Sources Requirements 22

6.0. Storage Structure Requirements 25

7.0. Pickling Line Requirements 26

8.0. HCl-T Requirements 32

9.0. Boiler Requirements 34

10.0. Emergency Generator Requirements - Cummins Engines 38

11.0. Emergency Generator Requirements - Caterpillar Engine 41

12.0. 40 CFR 63 Subpart CCCCCC Requirements 45

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
STRIP MILL					
039/2	S124	No. 5 Pickle Line	1975	310 tons/hr	Scrubber C124
039/4	F106	No. 5 Pickle Line Oil Coating	1975	310 tons/hr	None
042/1	S109A S109B S109C S109D S109E	No. 9 Tandem Mill	1975	150 tons/hr	Fume Exhaust and cleaning system
HCl-R	F125	Strip Steel HCl Acid Storage Tank	-----	25,000 gallons	Fume Scrubber
ACID PLANT					
HCl-A through H	Stack	HCl Storage Tanks (8) HCl and Waste Pickle Liquor (WPL)	1996	30,000 gallons each	Fume Scrubber
HYDROGEN PLANT					
OG1/1	Fugitive	Hydrogen Plant Cooling Tower	1995	1000 gpm	None
OG1/2	S0G1	Hydrogen Reformer	1995	19,717 scf/hr	None
OG1/3	Fugitive	Liquefied Hydrogen Storage Tank	1995	20,000 gallons	None
TIN MILL					
056/1	S300	Jumbo Anneal 1-4 (East); 10 mmBtu/hr each	1942	40 mmBtu/hr	None
057/1	S301	Jumbo Anneal 5-8 (Middle); 10 mmBtu/hr each	1948	40 mmBtu/hr	None
058/1	S302	Jumbo Anneal 9-12 (West); 10 mmBtu/hr each	1956	40 mmBtu/hr	None
059/1,2	S303 S303A	Tin Mill Cleaning Lines (2) 0.4 mmBtu/hr each	1938	0.8 mmBtu/hr	None
061/1	S305 S305A	Continuous Annealing Line 2 Alkaline Cleaning Exhaust	1961	96 mmBtu/hr	None
062/1	S306 S306A	Continuous Annealing Line 3 Alkaline Cleaning Exhaust	1970	96 mmBtu/hr	None
064/1	F308	No. 2 Weirlite Temper Mill	1965	100 tons/yr	None
066/1	N/A	No. 5 Temper Mill (no rolling oils)	1969	120 tons/hr	None
073/1,2	S317 S330	No. 2 Chrome Plating Line-Electrolytic Plating Cleaning and Pickling	1943 1966	60 tons/hr	Scrubbers C317 C330

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
074/1, 2, 3	S332 S318 S334	No. 4 Tin Plating Line - Electrolytic Plating Cleaning and Pickling Chemical Surface Treatment	1950	40 tons/hr	Scrubbers C332 C318 C334
076/1, 2, 3	S320 S339 S341	No. 6 Tin Plating Line - Plating Cleaning and Pickling Chemical Surface Treatment	1965	50 tons/hr	Scrubbers C320 C339 C341
077/2 077/3	S326 S327	Roll Shot Blaster 1 Roll Shot Blaster 2	1950 1965	24,000 lbs/hr each	Baghouses C326 C327
078/1 078/2 078/3	S322 (6 stacks)	Anode Shop Melting Pots (3); 5 mmBtu/hr each	1943	15 mmBtu/hr	None
HCl-T	1E	HCl Storage Tank	2014	8,700 gallons	Fume Scrubber 1C
BOILERS					
108	S108	Strip Mill Boiler 1	2013	99 mmBtu/hr	Low-NOx Burners
110	S110	Tin Mill Boiler 1	2013	99 mmBtu/hr	
111	S111	Tin Mill Boiler 2	2013	99 mmBtu/hr	
112	S112	Tin Mill Boiler 3	2013	99 mmBtu/hr	
113	S113	Tin Mill Boiler 4	2013	99 mmBtu/hr	
LIME STORAGE SILO					
096/1	C096	B-Outfall	---	30 tons	Bin Vent Filter
EMERGENCY GENERATORS					
EG-01	---	B-Outfall - Caterpillar 3412	1990	676 HP	None
EG-01	---	MAB - Cummins	2011	227 HP	None
EG-01	---	TM Comm Room - Cummins	2011	132 HP	None
EG-01	---	Strip Steel Comm Room - Cummins	2013	132 HP	None
EG-01	---	Half Moon Comm Room - Cummins	2014	132 HP	None
Gasoline Dispensing Facility					

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0032C	February 9, 2016
R13-3075	August 13, 2013

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.
[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement. **[45CSR§30-5.7.e.]**

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 CFR Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.
[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.
[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 CFR § 61.145, 40 CFR § 61.148, and 40 CFR § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 CFR § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 CFR 61 and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 CFR §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR § 82.161.

[40 CFR 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 CFR § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR §

68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.
[40 CFR 68]

3.1.9. The permittee shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2.]

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 CFR Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include

the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.
2. The result of the test for each permit or rule condition.
3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - R13-3075, Condition 4.4.1. and R13-0032, Condition 4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5. and 3.5.6. below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made

in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]: DEPAirQualityReports@wv.gov

[1]For all self monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ: DEPAirQualityReports@wv.gov **USEPA:** R3_APD_Permitting@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ: DEPAirQualityReports@wv.gov **USEPA:** R3_APD_Permitting@epa.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.
[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. Civil Consent Decree 5-96-CV-171 - has been terminated in accordance with Section XXXVIII.B. The permittee has certified completion and compliance with all requirements.

b. 40 CFR 60, subparts K, Ka, and Kb - The storage tanks associated with the facility are not subject to these subparts because the tanks were not constructed within the time frames.

c. 40 CFR 63 Subpart N - NESHAPs for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Continuous chromium electroplating of steel is different

from the chromium electroplating operations regulated in the existing NESHAP standard. Therefore, 40 CFR 63 Subpart N is not applicable to this facility.

d. 40 CFR 63 Subpart Q - NESHAP for Industrial Process Cooling Towers. No chromium-based water treatment chemicals are used at the facility.

e. 40 CFR 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. No halogenated solvent cleaning machines exist at the facility.

f. 40 CFR Part 63, Subparts DDDDD and JJJJJJ (Boiler MACTs) - Permit R13-0032C was issued to remove the HCl Acid Regeneration Units 1, 2, 3 and 4 which have been permanently shut down. The facility is now designated as an Area Source for hazardous air pollutants (HAPs). This designation allows the Jumbo Anneals, Continuous Annealing lines, Anode Pots, and natural gas fired comfort heating equipment to become subject to the area source boiler MACT, 40 CFR 63, Subpart JJJJJJ, however 40 CFR §63.11195(e) exempts gas-fired boilers. The new natural gas fired boilers will remain subject to 40 CFR 63 Subpart DDDDD because of the "once-in, always-in" requirement.

g. A Permit Determination form, dated December 10, 2002, and received by this Office on December 12, 2002 was submitted for the installation of a Polymer coating line. No permit was required based on information received in the Permit Determination form.

h. Hydrogen Reforming Facility - The Methane Hydrogen Reformer was constructed in 1995 by BOC Gases Division after a Rule 13 permit determination deemed that no permit was necessary. In April 2009, ownership was transferred to ArcelorMittal Weirton, Inc. Since there are no applicable requirements on this equipment, it was not included in the Title V permit.

i. 40 CFR Part 64 - Compliance Assurance Monitoring - The Tandem Mills and the Chrome and Tin Plating Lines have PM emission limitations but no PM control devices. The control devices are for VOC emissions but there are no VOC emissions limitations for these sources, therefore these sources do not meet the applicability requirements of 40 CFR §§ 64.2(a)(1) and (2).

The HCl Storage Tanks, Lime Storage Silo and Roll Shot Blasters are not major sources and do not meet the applicability requirement of 40 CFR § 64.2(a)(3).

The No. 5 Pickling Line is subject to 40 CFR part 63Subpart CCC and is exempt from CAM in accordance with 40 CFR § 64.2(b)(1)(i).

There are no control devices associated with the boilers or emergency generators. These and all other emission sources have no control devices and do not meet the applicability requirements of 40 CFR § 64.2(a)(2).

l. 40 CFR 68 Risk Management Plans - The facility stores liquefied hydrogen, but engineering controls are in place to limit the amount of hydrogen stored to less than RMP threshold amounts, <10,000 lbs for a flammable substance. The rule does not apply at this time. An RMP Plan would be developed if thresholds are triggered for an applicable chemical.

4.0. Indirect Fired Combustion Source Requirements [Jumbo Anneals 1-4 (056/1), 5-8 (057/1), 9-12 (058/1), Continuous Annealing Lines 2 and 3 (061/1, 062/1), Anode Shop Melting Pots (078/1, 078/2, 078/3)]

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

Emission Unit ID	Description	PM limit
056/1, 057/1, 058/1	Jumbo Anneals 1-4 (East), 5-8 (Middle), and 9-12 (West)	36.72 pph
061/1, 062/1	Continuous Annealing Lines 2 and 3	

[45CSR§§2-4.1., 4.1.b., and 4.3.]

4.1.3. The visible emission standards set forth in Section 4.1.1. of this permit shall apply at all times except in periods of start-ups, shutdowns and malfunctions.
[45CSR§2-9.1. (Anode shop melting pots exempt)]

4.1.4. At all times, including periods of start-ups, shutdowns and malfunctions, the permittee shall, to the extent practicable, maintain and operate any fuel burning units including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2. (Anode shop melting pots exempt)]

4.1.5. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

Emission Unit ID	Description	SO_2 limit
056/1, 057/1, 058/1	Jumbo Anneals 1-4 (East), 5-8 (Middle), and 9-12 (West)	1264.8 pph
061/1, 062/1	Continuous Annealing Lines 2 and 3	

[45CSR§§10-3.1. and 3.1.e.]

4.1.6. No person shall circumvent the provisions of 45CSR10 by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.
[45CSR§10-3.6. (Anode shop melting pots exempt)]

4.1.7. No owner or operator shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable

standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. **[45CSR§10-11.1.]**

4.1.8. The permittee agrees to comply with the following SO_2 control requirements: Annealing Furnaces shall be limited to firing only natural gas and mixed gas (comprised of approximately 70% natural gas and 30% air). **[CO-SIP-C-2003-28, Condition IV.3.(h)]**

4.2. Monitoring Requirements

4.2.1. Exempt (45CSR§2A-3.1.b., 45CSR§2-11.1., 45CSR§10-10.3., 45CSR§10-10.1.)

4.3. Testing Requirements

4.3.1. Exempt (45CSR§2A-3.1.b., 45CSR§2-11.1., 45CSR§10-10.3., 45CSR§10-10.1.)

4.4. Recordkeeping Requirements

4.4.1. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c. and 45CSR§2A-7.1.a.1. (056/1, 057/1, 058/1, 061/1, 062/1)]

4.5. Reporting Requirements

4.5.1. Exempt (45CSR§2-11.1., 45CSR§10-10.3., 45CSR§10-10.1.)

4.6. Compliance Plan

4.6.1. None.

5.0. Manufacturing Process Source Requirements [Tandem Mill (042/1), Temper Mill (066/1), Weirlite Temper Mill (064/1), Plating Lines (073/1,2; 074/1,2,3; 076/1,2,3), and Roll Shot Blasters (077/2, 077/3)]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except for smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§§7-3.1. and 3.2.]

5.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified in the table below:

Emission Unit ID	Description	PM Limit (pph)
073/1, 2	No. 2 Chrome Plating Line	33.8
074/1, 2, 3	No. 4 Tin Plating Line	32.2
076/1, 2, 3	No. 6 Tin Plating Line	33.0

[45CSR§7-4.1.]

5.1.3. If a duplicate source operation that meets the requirements of this rule is expanded or if a source operation that meets the requirements of this rule is expanded to form a duplicate source operation, the total allowable emission rate for the expanded portion shall be determined by the formula found in 45CSR§7-4.4.:

Emission Unit ID	Description	PM Limit (pph)
064/1	No. 2 Weirlite Temper Mill	24.2
066/1	No. 5 Temper Mill	25.8

[45CSR§§7-4.1. and 4.4.]

5.1.4. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the formula found in 45CSR§7-4.8.:

Emission Unit ID	Description	PM Limit (pph)
042/1	No. 9 Tandem Mill	31.8
077/2	Roll Shot Blaster 1	15.2
077/3	Roll Shot Blaster 2	15.2

[45CSR§§7-4.1. and 4.8.]

5.1.5. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

5.1.6. No person shall cause, suffer, allow or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

5.2. Monitoring Requirements

5.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted once per week during periods of normal facility operation using 40 CFR 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point subject to an opacity limit, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 45CSR7." If no visible emissions are observed after one month, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month as noted above.
[45CSR§30-5.1.c.]

5.3. Testing Requirements

5.3.1. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§§7-8.1. and 8.2.]

5.4. Recordkeeping Requirements

5.4.1. Records of the visible emission checks conducted in accordance with Section 5.2.1. of this permit shall be maintained on site for a period of no less than five (5) years and shall include all data required by 40 CFR 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0. Storage Structure Requirements [Lime Storage Silo (096/1)]

6.1. Limitations and Standards

6.1.1. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]

6.1.2. No person shall cause, suffer, allow or permit any storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

6.2. Monitoring Requirements

6.2.1. The permittee shall monitor the PM emissions by conducting visible emissions checks each time lime is loaded into the storage silo using 40 CFR Part 60, Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed from a lime storage silo emission point subject to an opacity limit, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 45CSR7" as expeditiously as possible.
[45CSR§30-5.1.c.]

6.3. Testing Requirements

6.3.1. None.

6.4. Recordkeeping Requirements

6.4.1. Records of the visible emission checks conducted in accordance with Section 6.2.1. of this permit shall be maintained on site for a period of no less than five (5) years and shall include all data required by 40 CFR 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

6.5. Reporting Requirements

6.5.1. None.

6.6. Compliance Plan

6.6.1. None.

7.0. Pickling Line Requirements [(039/2), HCl-A through HCl-H, HCl-R]

7.1. Limitations and Standards

7.1.1. Potential Hazardous Material Emissions--Persons responsible for manufacturing process source operations from which hazardous particulate matter material may be emitted such as, but not limited to, lead, arsenic, beryllium and other such materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluations of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Director working in conjunction with other appropriate governmental agencies.
[45CSR§7-4.13.]

7.1.2. **Pickling lines.** No owner or operator of an existing affected continuous or batch pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv) or HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent. Compliance with this limit shall demonstrate compliance with the less stringent limitation of 45CSR§7-4.2.
[40 CFR § 63.1157(a), 45CSR34 and 45CSR§7-4.2]

7.1.3. **Hydrochloric acid storage vessels.** The permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.
[40 CFR § 63.1159(b) and 45CSR34]

7.1.4. a. The permittee shall comply with the operation and maintenance requirements prescribed under 40 CFR §63.6(e).

b. The permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan is hereby incorporated by reference into the source's Title V permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

i. Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;

ii. Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;

iii. Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

iv. Require an inspection of each scrubber at intervals of no less than 3 months with:

A. Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

B. Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

C. Repair or replacement of droplet eliminator elements as needed;

D. Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

E. Adjustment of damper settings for consistency with the required air flow.

v. If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

vi. The owner or operator shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this subpart.

vii. The owner or operator shall maintain a record of each inspection, including each item identified in Section 7.1.4.b.iv. of this permit, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

[40 CFR § 63.1160(b)(1) and 45CSR34]

7.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except for smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§§7-3.1. and 3.2.]

7.2. Monitoring Requirements

7.2.1. a. The permittee shall:

1. Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in Section 7.3. of this permit. Performance tests shall be conducted no less frequently than every 2½ years or twice per Title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit.

2. In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in Section 7.1.4.b. of this permit.

3. If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the measurement and recording of the appropriate operating parameters.

4. Failure to record each of the operating parameters listed in Section 7.2.1.a.2. of this permit is a violation of the monitoring requirements of this subpart.

5. Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

6. The permittee may develop and implement alternative monitoring requirements subject to approval by the Administrator.

b. The owner or operator of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.
[40 CFR §§63.1162(a) and (c) and 45CSR34]

7.2.2. The permittee shall monitor the PM emissions by conducting visible emissions checks in accordance with Section 5.2.1. of this permit.
[45CSR§30-5.1.c.]

7.3. Testing Requirements

7.3.1. a. **Demonstration of compliance.** The permittee shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in 40 CFR §63.7 of subpart A and in this section. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

b. **Establishment of scrubber operating parameters.** During the performance test for each emission control device, the permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per paragraph a. of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

c. **Test methods.**
1. The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance with Section 7.1.2. of this permit:

i. Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

ii. Method 2, to determine gas velocity and volumetric flow rate;

iii. Method 3, to determine the molecular weight of the stack gas;

iv. Method 4, to determine the moisture content of the stack gas; and

v. Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl shall be calculated for each run as follows:

$$C_{HCl}(\text{ppmv}) = 0.659\ C_{HCl}(\text{mg/dscm})$$

where C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

2. The permittee may use equivalent alternative measurement methods approved by the Administrator. **[40 CFR § 63.1161 and 45CSR34]**

7.4. Recordkeeping Requirements

7.4.1. a. **General recordkeeping requirements.** As required by 40 CFR §63.10(b)(2) of subpart A, the permittee shall maintain records for 5 years from the date of each record of:

1. The occurrence and duration of each malfunction of operation (i.e., process equipment);

2. The occurrence and duration of each malfunction of the air pollution control equipment;

3. All maintenance performed on the air pollution control equipment;

4. Actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.1259(c) and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation);

5. All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

6. All results of initial or subsequent performance tests;

7. If the permittee has been granted a waiver from recordkeeping or reporting requirements under 40 CFR §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

8. If the permittee has been granted a waiver from the initial performance test under 40 CFR §63.7(h) of subpart A, a copy of the full request and the Administrator's approval or disapproval;

9. All documentation supporting initial notifications and notifications of compliance status required by 40 CFR §63.9 of subpart A of this part; and

10. Records of any applicability determination, including supporting analyses.

b. **Subpart CCC records**.

1. In addition to the general records required by Section 7.4.1.a. of this section, the permittee shall maintain records for 5 years from the date of each record of:

i. Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;

ii. Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

iii. Each maintenance inspection and repair, replacement, or other corrective action.

2. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Administrator for a period of 5 years after each revision to the plan.

c. **Recent records.** General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

[40 CFR § 63.1165 and 45CSR34]

7.4.2. Records of the visible emission checks conducted in accordance with Section 7.2.2. of this permit shall be maintained on site for a period of no less than five (5) years and shall include all data required by 40 CFR 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c.]

7.5. Reporting Requirements

7.5.1. a. **Notification of performance test.** As required by 40 CFR §63.9(e), the permittee shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator to review and approve the site-specific test plan required under 40 CFR §63.7(c) and, if requested by the Administrator, to have an observer present during the test.

b. **Notification of compliance status.** The permittee shall submit a notification of compliance status as required by 40 CFR §63.9(h).

[40 CFR §§63.1163(d) and (e)]

7.5.2. a. **Reporting results of performance tests.** Within 60 days after the date of completing each performance test (defined in 40 CFR §63.2), as required by this subpart you must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/;cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR §63.13.

b. **Progress Reports.** The owner or operator of an affected source who is required to submit progress reports under 40 CFR §63.6(i) of subpart A of this part shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

c. **Reporting malfunctions.** The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded shall be stated in a semiannual report. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR §63.1159(c), including actions taken to correct a malfunction. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

[40 CFR § 63.1164 and 45CSR34]

7.6. Compliance Plan

7.6.1. None.

8.0. HCl-T Requirements [HCl-T]

8.1. Limitations and Standards

8.1.1. The HCI Tank (HCl-T) shall be operated and maintained in accordance with the following operating and emission limitations:

a. The concentration of HCl (mineral acid) released into the atmosphere from the corresponding emission point of the vessel shall not exceed 210 milligrams per dry cubic meter at standard conditions.
[45 CSR §7-4.2 and Table 45-7B to 45 CSR 7]

b. The HCl Tank shall be equipped with a conservation vent that the positive pressure port is vented/routed to the fume scrubber at all times while the tank is in service. During the HCl filling operations, the fume scrubber 1C (recirculation pump) shall be operated during entire filling operation.

c. The fume scrubber 1C and associated closed-vent system shall be maintained in accordance with the following:

i. Shall maintain the recirculation pump in accordance with the pump manufacturer's maintenance recommendations.

ii. Shall clean the scrubber internals and droplet eliminator at intervals sufficient to prevent buildups of solids or fouling.

iii. Inspection of the scrubber shall be conducted on intervals of at least once every 6 months.

iv. Such inspections shall at the minimum include the following:

1. Cleaning and replacement of any plugged spray nozzles or other liquid delivery devices;

2. Repair or replacement of missing, misaligned, or damaged baffles trays, or other internal components; and

3. Cleaning, repair or replacement of droplet eliminator elements as needed.

[45CSR13 - R13-0032, Condition 4.1.1.]

8.1.2. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this permit may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. Compliance with this streamlined requirement shall be considered compliance with 45CSR§7-9.1.
[45CSR13 - R13-0032, Condition 4.1.2.]

8.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the fume scrubber 1C and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11. and 45CSR13 - R13-0032, Conditions 4.1.3.]

8.2. Monitoring Requirements

8.2.1. None.

8.3. Testing Requirements

8.3.1. None.

8.4. Recordkeeping Requirements

8.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures, which shall include the inspections as listed in Condition 8.1.1.c. **[45CSR13 - R13-0032, Condition 4.4.2.]**

8.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - R13-0032, Condition 4.4.3.]

8.5. Reporting Requirements

8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

9.0. Boiler Requirements [S108, S110, S111, S112, S113]

9.1. Limitations and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

9.1.2. The visible emission standards set forth in Section 9.1.1. of this permit shall apply at all times except in periods of start-ups, shutdowns and malfunctions.
[45CSR§2-9.1.]

9.1.3. At all times, including periods of start-ups, shutdowns and malfunctions, the permittee shall, to the extent practicable, maintain and operate any fuel burning units including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.
[45CSR§2-9.2.]

9.1.4. No person shall circumvent the provisions of 45CSR10 by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.
[45CSR§10-3.6.]

9.1.5. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period, the permittee shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day
[45CSR§10-3.8.]

9.1.6. No owner or operator shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

9.1.7. The following conditions and requirements are specific to Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4:

a. CO emissions emitted to the atmosphere from each boiler shall not exceed 3.69 lbs/hr with an annual rate not to exceed 16.2 tpy. Compliance with this limit shall be satisfied by optimization of the CO concentration to no greater than 50 ppm during the tune-up as required in 9.1.7.c.

b. NO_x emissions emitted to the atmosphere from each boiler shall not exceed 3.64 lbs/hr with an annual rate not to exceed 16.0 tpy. Compliance with this limit is by verifying the manufacturer's NO_x emission setting and/or specification during the tune-up of the unit.

c. **Tin Mill Boiler 3 (S112), Tin Mill Boiler 4 (S113).** An annual tune-up with the subsequent tune-up for each unit required to be completed by not later than 13 months after the previous tune-up of each unit in accordance with the applicable requirements of 40 CFR 63, Subpart DDDDD.

Strip Steel Boiler 1 (S108), Tin Mill Boiler 1 (S110), Tin Mill Boiler 2 (S111). A tune-up every five years with the subsequent tune-up for each unit required to be completed by not later than 61 months after the previous tune-up of each unit in accordance with the applicable requirements of 40 CFR 63, Subpart DDDDD.

If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. Subsequent tune-ups shall consist of the following:

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, which includes the manufacturer's NO_x concentration specification of 30 ppm;

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR §§63.7500(a)(1), 63.7505(a), 63.7515(d), 63.7540(a)(10), 63.7540(a)(12) and Table 3 to Subpart DDDDD of Part 63 - Work Practice Standards, 45CSR13 - R13-3075, 4.1.1.a. through c., and 45CSR34]

e. Each boiler shall only be fired with pipeline quality natural gas. This condition satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.

[45CSR§2A-3.1.a., 45CSR§10-10.3., 45CSR§10A-3.1.b., and 45CSR13 - R13-3075, 4.1.1.d.]

f. Each boiler shall be designed or constructed with a maximum design heat input of 99.9 MMBtu/hr. Compliance with this limit at each boiler shall be satisfied by limiting the annual consumption of natural gas to 857.6 MM cubic feet, measured as a rolling yearly total.

[45CSR13 - R13-3075, 4.1.1.e.]

9.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11. and 45CSR13 - R13-3075, 4.1.4.]

9.2. Monitoring Requirements

9.2.1. None.

9.3. Testing Requirements

9.3.1. None.

9.4. Recordkeeping Requirements

9.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - R13-3075, 4.4.2.]

9.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - R13-3075, 4.4.3.]

9.4.3. The permittee shall keep the following records in accordance with 40 CFR § 63.7555. This includes but not limited to the following information during the tune up as required in Condition 9.1.7.c. and 40 CFR §63.7540:

a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. If concentrations of NO_x were taken during the tune-up of the unit, record of such measurements shall be included;

b. A description of any corrective actions taken as a part of the tune-up; and

c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[40 CFR §§63.7540(a)(10)(vi) and 63.7555, 45CSR13 - R13-3075, 4.4.4. and 45CSR34]

9.4.4. For each month, the permittee shall record the hours of operation and amount of natural gas consumed by the Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4 and shall calculate the rolling yearly total of natural gas consumed. Such records shall be maintained in accordance with Condition 3.4.2. of this permit.
[40CFR§60.48c(g)(2), 45CSR§2A-7.1.a.1., 45CSR13 - R13-3075, 4.2.1. and 45CSR16]

9.5. Reporting Requirements

9.5.1. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following subdivisions:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
2. Excess opacity does not exceed 40%.

b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in section 9.5.1.a., by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The permittee shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;
2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

9.5.2. The permittee shall submit an "Initial Notification" to the Director of the initial start-up of Strip Mill Boiler 1 and Tin Mill Boilers 1, 2, 3, and 4 within 15 days after the actual date of start-up.
[40CFR§§63.7545(c), 60.48c(a), 60.7, 45CSR13 - R13-3075, 4.5.1., 45CSR16, and 45CSR34]

9.5.3. The permittee shall submit annual "Compliance Reports" to the Director with the first report being submitted by no later than January 31, 2017 and subsequent reports submitted by no later than January 31 of the following year. Such reports shall contain the information specified in 40 CFR §§63.7550(c)(5) (i)through (iv) and (xiv) which are:

a. Permittee and facility name, and address;
b. Process unit information, emission limitations, and operating limitations;
c. Date of report and beginning and ending dates of the reporting period;
d. The total operating time during the reporting period of each affected unit;
e. Include the date of the most recent tune-up for each boiler; and
f. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

[40CFR §§63.7550(a)-(c), 45CSR13 - R13-3075, 4.5.2. and 45CSR34]

9.6. Compliance Plan

9.6.1. None.

10.0. Emergency Generator Requirements [Cummins engines (EG-01)]

10.1. Limitations and Standards

10.1.1. Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
[45CSR16, 40 CFR § 60.4205(b)]

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified below:

For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
[45CSR16, 40 CFR § 60.4202(a)(2)]

10.1.2. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR §§60.4204 and 60.4205 over the entire life of the engine.
[45CSR16, 40 CFR § 60.4206]

10.1.3. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
[45CSR16, 40 CFR § 60.4207(b)]

10.1.4. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs 1. through 3. below. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1. through 3. below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 1. through 3. below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary ICE in emergency situations.

2. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs i. through iii. below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 3. below counts as part of the 100 hours per calendar year allowed by this paragraph.

   i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2. above. Except as provided in paragraph i. below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D. The power is provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR16, 40 CFR § 60.4211(f)]

10.1.5. A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must meet the requirements of 40 CFR part 63, subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.
[45CSR34, 40 CFR § 63.6590(c)(7)]

10.2. Monitoring Requirements

10.2.1. If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
[45CSR16, 40 CFR §60.4209(a)]

10.2.2. a. If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under Section 10.3.1.

1. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

2. Change only those emission-related settings that are permitted by the manufacturer; and

3. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

b. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Section 10.1.1., you must comply by purchasing an engine certified to the emission standards in Section 10.1.1., for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Section 10.3.1.

[45SR16, 40 CFR §§60.4211(a) and (c)]

10.3. Testing Requirements

10.3.1. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test in accordance with 40 CFR §60.4212 to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[45CSR16, 40 CFR §§ 60.4211(g) and (g)(2)]

10.4. Recordkeeping Requirements

10.4.1. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[45CSR16, 40 CFR § 60.4214(b)]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.

11.0. Emergency Generator Requirements [Caterpillar 3412 engine]

11.1. Limitations and Standards

11.1.1. For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
[45CSR34, 40 CFR § 63.6590(a)(1)(iii)]

11.1.2. If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart that apply to you.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[1]Sources have the option to utilize an oil analysis program as described in Section 11.2.4. in order to extend the specified oil change requirement in Table 2d of this subpart

[45CSR34, 40 CFR § 63.6603(a) and Table 2d, Condition 4. of 40 CFR 63 Subpart ZZZZ]

11.1.3. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
[45CSR34, 40 CFR § 63.6604(b)]

11.1.4. a. You must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34, 40 CFR § 63.6605]

11.1.5. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs 1. through 3. below. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1. through 3. below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 1. through 3. below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary RICE in emergency situations.

2. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs i. through iii. of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 3. below counts as part of the 100 hours per calendar year allowed by this paragraph.

   i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

   ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

   iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2. above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34, 40 CFR § 63.6640(f)]

11.2. Monitoring Requirements

11.2.1. If you own or operate an existing emergency or black start stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
[45CSR34, 40 CFR § 63.6625(e)(3)]

11.2.2. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
[45CSR34, 40 CFR § 63.6625(f)]

11.2.3. If you operate an existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Section 11.1.2. apply.
[45CSR34, 40 CFR § 63.6625(h)]

11.2.4. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in Section 11.1.2., you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in Section 11.1.2. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
[45CSR34, 40 CFR § 63.6625(i)]

11.3. Testing Requirements

11.3.1. None.

11.4. Recordkeeping Requirements

11.4.1. You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you. You must demonstrate continuous compliance by:

i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34, 40 CFR §§63.6655(d), 63.6640(a), and Table 6, Condition 9. of 40 CFR 63, Subpart ZZZZ]

11.4.2. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to management practices as in Section 11.1.2.
[45CSR34, 40 CFR § 63.6655(e)]

11.4.3. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or 40 CFR §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
[45CSR34, 40 CFR §§ 63.6655(f) and (f)(2)]

11.4.4. a. Your records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).

b. As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

c. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

[45CSR34, 40 CFR § 63.6660]

11.5. Reporting Requirements

11.5.1. None.

11.6. Compliance Plan

11.6.1. None.

12.0. 40 CFR 63 Subpart CCCCCC Requirements

12.1. Limitations and Standards

12.1.1. a. The affected source to which this MACT applies is each gasoline dispensing facility (GDF) that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

b. If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in 40 CFR §63.11116, as specified in Section 12.2.1.

c. An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For existing sources, recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this MACT only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in 40 CFR §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

[45CSR34, 40 CFR §§63.11111(a), (b) and (e)]

12.1.2. You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34, 40 CFR §63.11115(a)]

12.2. Monitoring Requirements

12.2.1. You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

1. Minimize gasoline spills;

2. Clean up spills as expeditiously as practicable;

3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[45CSR34, 40 CFR §63.11116(a)]

12.3. Testing Requirements

12.3.1. None.

12.4. Recordkeeping Requirements

12.4.1. You must keep applicable records as specified below.

Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs 1. and 2. below.

1. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

2. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 12.1.2., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34, 40 CFR §§63.11115(b) and 63.11125(d)]

12.5. Reporting Requirements

12.5.1. You are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
[45CSR34, 40 CFR §63.11116(b)]

12.6. Compliance Plan

12.6.1. None.

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West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02900001-2017**
Application Received: **April 12, 2016**
Plant Identification Number: **029-00001**
Permittee: **ArcelorMittal Weirton LLC**
Mailing Address: **100 Pennsylvania Avenue, Weirton, WV 26062**

Revised: N/A

Physical Location:	Weirton, Hancock County, West Virginia
UTM Coordinates:	533.70 km Easting • 4474.50 km Northing • Zone 17
Directions:	From US 22 take Exit 2 to WV-2 North to Downtown Weirton. Continue on WV-2 approximately 3 miles. Approaching the 10th traffic light, at Pennsylvania Avenue, turn right into the driveway of the Mill Administration Building.

Facility Description

ArcelorMittal Weirton LLC operates a steel finishing facility that includes a Strip Mill with steel pickling and cold rolling operations, Tin Mill with tempering and electrolytic plating (tin and chrome), Hydrogen Plant, and Boilers. Other operations at the facility include emergency generators, storage tanks, wastewater treatment plants and support/maintenance shops.

In the previous Title V permits, the facility operations had been divided into three parts: Part 1 included the Boilers and emergency generators, Part 2 included the Cold operations and hydrogen plant, and Part 3 included the Hot operations, which are permanently shutdown. This permit now combines Parts 1 and 2, which is now the entire facility.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]

Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	211.78	111.65

Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Nitrogen Oxides (NO_X)	235.99	157.79
Particulate Matter ($PM_{2.5}$)	14.48	5.75
Particulate Matter (PM_{10})	29.56	11.62
Total Particulate Matter (TSP)	91.79	44.11
Sulfur Dioxide (SO_2)	2.33	0.91
Volatile Organic Compounds (VOC)	39.49	22.36

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2015 Actual Emissions
Formaldehyde	0.28	0.11
Hydrochloric Acid	6.53	1.38
Chromium	0.46	0.19
Hexane	6.66	2.55
Nickel	2.63	0.01

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 211.78 tons per year of Carbon Monoxide and 235.99 tons per year of Nitrogen Oxides. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, ArcelorMittal Weirton LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM emission limits
	45CSR6	Open burning prohibited
	45CSR7	Manufacturing sources PM emission limits
	45CSR10	SO_2 emission limits
	45CSR11	Standby plans for emergency episodes
	45CSR13	Construction Permits
	45CSR16	Performance Standards for New Stationary Sources
	WV Code § 22-5-4(a)(14)	The Secretary can request any pertinent information such as annual emission inventory reporting
	45CSR30	Operating permit requirement
	45CSR34	HAPs emission standards
	40 CFR 60 Subpart Dc	NSPS for small, industrial boilers
	40 CFR 60 Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines

	40 CFR 61	Asbestos inspection and removal
	40 CFR 63 Subpart CCC	Steel Pickling - HCl Process MACT
	40 CFR 63 Subpart ZZZZ	Reciprocating Internal Combustion Engine MACT
	40 CFR 63 Subpart DDDDD	Industrial Boiler MACT
	40 CFR 63 Subpart CCCCCC	Gasoline Dispensing Facilities MACT
	40 CFR 82 Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 CFR Part 61 (NESHAPs), and 40 CFR Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.,* 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
CO-SIP-C-2003-28	July 30, 2003	
R13-0032C	February 9, 2016	
R13-3075	August 13, 2013	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a third renewal. The following changes have been made since the last permit revision was issued:

Emission Units Table - Several emission units are no longer in service and have been removed from the Table including: Hot Strip Mill, No. 7 Tandem Mill, No. 8 Skin Mill, all HCl Regeneration Units, Veolia Lime Storage Tank, Continuous Annealing Line 1, No. 1 Weirlite Temper Mill, No. 4 Temper Mill, and No. 5 Tin/Chrome Plating Line. These sources have no NSR permits associated with them. Reheat Furnaces 1 and 2 have been removed and their associated NSR permits have been declared inactive. Additionally, four (4) emergency generators were added to the Table.

Condition 3.7.2.d. was revised to eliminate the exemption for tank OB6/1 because the tank has been removed.

Previous permit Part 1 of 3:

- Boilers 1 and 2 are no longer operating and HP Boilers 3, 4, and 5 have been decommissioned, therefore the following old permit conditions were not included in the renewal permit: 4.1.2., 4.1.8., 4.1.12., 4.2.4. through 4.2.7., 4.3.1. through 4.3.3., 4.4.1., and 4.5.1. Appendix B was removed because Condition 4.1.8., which referred to it, was removed.

- Old Conditions 4.1.9., 4.2.3., 4.5.3., and Appendix A were removed because 45CSR40 - CAIR NOx Ozone Season Trading Program rule no longer applies to the facility since the replacement of the boilers with natural gas fired boilers which are less than 250 mmBtu/hr each.

- Old Condition 4.1.10. was deleted because this facility became an area source of HAPs before the existing source compliance date.

- Old Condition 4.1.11.c., now Condition 9.1.7.c., was updated because boilers S108, S110, and S111 have continuous oxygen trim systems, which require tune-ups once every five years. Boilers S112 and S113 still require annual tune-ups.

- Old Condition 4.1.13. was deleted because the one time energy assessment has been completed.

- Old Conditions 4.2.1., 4.2.2., and Appendix C were removed because the new natural gas boilers are exempt from the requirement to have Rule 2 and 10 Monitoring Plans in accordance with 45CSR §2-8.4.b. and 45CSR §10-10.3.

Previous permit Part 2 of 3:

- Old Section 4.0 and Conditions 3.7.2.a. and b. were deleted because the Reheat Furnaces have been removed and permits R13-1137 and R13-1310 have been declared inactive.

- Conditions 4.1.2. and 4.1.5. were updated to remove Continuous Annealing Line 1 because it is no longer in service.

- Conditions 5.1.2., 5.1.3., and 5.1.4. were updated to remove the Hot Strip Mill, No. 8 Skin Mill, No. 5 Tin/Chrome Plating Line, No. 1 Weirlite Temper Mill, No. 4 Temper Mill, and No. 7 Tandem Mill because these sources are no longer in service.

- Section 6.0 - Lime Storage Silo 095 was removed because it is no longer in service.

- Section 7.0. - The HCl Regeneration Units are no longer in service, therefore they were removed from the heading and the conditions. The remaining conditions were renumbered. The headings for Monitoring, Testing, Recordkeeping, and Reporting Requirements were rearranged to be consistent with the rest of the permit. Updated language for 40 CFR 63 Subpart CCC which was revised in 2012.

- Acid Tank, HCl-T, requirements were moved to Section 8.0. because it serves the Tin Mill and not the Pickling line, therefore it is not subject to the Pickling MACT requirements.

Indirect Fired Combustion Sources - Section 4.0. - In accordance with 45CSR§2A-3.1.b., the Jumbo Anneals and Continuous Annealing Lines are exempt from the visible emission testing and weight emission testing requirements of section 5, and the monitoring plan requirements of section 6. In accordance with 45CSR§10-10.3., these sources are exempt from the testing, monitoring, recordkeeping and reporting requirements of section 8. In accordance with 45CSR§2-11.1., the three anode shop melting pots are exempt from 45CSR2 sections 4, 5, 6, 8, and 9 (weight emission standards; fugitive particulate matter; registration; testing, monitoring, recordkeeping and reporting; and start-ups, shutdowns and malfunctions; respectively). In accordance with 45CSR§10-10.1., these sources are exempt from 45CSR10 section 3 (sulfur dioxide weight emission standards) and sections 6 through 8 (registration; permits; and testing, monitoring, recordkeeping, and reporting; respectively).

40 CFR 60 Subpart IIII - Section 10.0. - The four new Cummins emergency generators are subject to this NSPS because they are compression ignition (CI) engines and were installed after 2007. The engines must be certified that they meet emission standards, must be operated and maintained to achieve those standards over the life of the engine, and are subject to hourly limitations in emergency mode. Testing is required only if the

engines are not maintained according to manufacturer's written instructions. The requirements have been added to Section 10.0 of the permit.

40 CFR 63 Subpart ZZZZ - Section 11.0. - The Caterpillar engine is a CI engine installed in 1990. As an existing emergency engine greater than 500 HP at a facility that was major for HAPs, it had no requirements from Subpart ZZZZ. The facility was designated as an area source for HAPs when the boilers were replaced and the HCl regeneration units were removed in 2016. Because the engine was not subject to Subpart ZZZZ previously, the "once in, always in" determination cannot be made here. Therefore, the engine has new requirements from Subpart ZZZZ, which have been included in Section 11.0. of the permit. The Cummins engines are also subject to Subpart ZZZZ, but in accordance with 40 CFR §63.6590(c)(7), these engines meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements in 40 CFR 60 Subpart IIII.

40 CFR 63 Subpart CCCCCC Area Source NESHAP - Gasoline Dispensing Facilities requirements were added in Section 12.0.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

a. Civil Consent Decree 5-96-CV-171 - has been terminated in accordance with Section XXXVIII.B. The permittee has certified completion and compliance with all requirements.

b. 40 CFR 60, subparts K, Ka, and Kb - The storage tanks associated with the Cold Side of the facility are not subject to these subparts because the tanks were not constructed within the time frames.

c. 40 CFR 63 Subpart N - NESHAPs for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Continuous chromium electroplating of steel is different from the chromium electroplating operations regulated in the existing NESHAP standard. Therefore, 40 CFR 63 Subpart N is not applicable to this facility.

d. 40 CFR 63 Subpart Q - NESHAP for Industrial Process Cooling Towers. No chromium-based water treatment chemicals are used at the facility.

e. 40 CFR 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. No halogenated solvent cleaning machines exist at the facility.

f. 40 CFR Part 63, Subparts DDDDD and JJJJJJ (Boiler MACTs) - Permit R13-0032C was issued to remove the HCl Acid Regeneration Units 1, 2, 3 and 4 which have been permanently shut down. The facility is now designated as an Area Source for hazardous air pollutants (HAPs). This designation allows the Jumbo Anneals, Continuous Annealing lines, Anode Pots, and natural gas fired comfort heating equipment to become subject to the area source boiler MACT, 40 CFR 63, Subpart JJJJJJ, however 40 CFR §63.11195(e) exempts gas-fired boilers. The new natural gas fired boilers will remain subject to the 40 CFR 63 Subpart DDDDD because of the “once-in, always-in” requirement.

g. A Permit Determination form, dated December 10, 2002, and received by this Office on December 12, 2002 was submitted for the installation of a Polymer coating line. No permit was required based on information received in the Permit Determination form.

h. Hydrogen Reforming Facility - The Methane Hydrogen Reformer was constructed in 1995 by BOC Gases Division after a Rule 13 permit determination deemed that no permit was necessary. In April 2009, ownership was transferred to ArcelorMittal Weirton, Inc. Since there are no applicable requirements on this equipment, it was not included in the Title V permit.

i. 40 CFR Part 64 - Compliance Assurance Monitoring - The Tandem Mills and the Chrome and Tin Plating Lines have PM emission limitations but no PM control devices. The control devices are for VOC emissions but there are no VOC emissions limitations for these sources, therefore these sources do not meet the applicability requirements of 40 CFR §§ 64.2(a)(1) and (2).

The HCl Storage Tanks, Lime Storage Silos and Roll Shot Blasters are not major sources and do not meet the applicability requirement of 40 CFR § 64.2(a)(3).

The No. 5 Pickling Line is subject to 40 CFR part 63Subpart CCC and is exempt from CAM in accordance with 40 CFR § 64.2(b)(1)(i).

There are no control devices associated with the boilers or emergency generators. These and all other emission sources have no control devices and do not meet the applicability requirements of 40 CFR § 64.2(a)(2).

j. 40 CFR 68 Risk Management Plans - The facility stores liquefied hydrogen, but engineering controls are in place to limit the amount of hydrogen stored to less than RMP threshold amounts, <10,000 lbs for a flammable substance. The rule does not apply at this time. An RMP Plan would be developed if thresholds are triggered for an applicable chemical.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Friday, February 17, 2017
Ending Date: Monday, March 20, 2017

Point of Contact

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

ArcelorMittal Weirton LLC requested to:

Change condition 7.2.1.a.1. to delete annual testing, leaving requirement to test every 2½ years. Test results have indicated compliance, therefore the permit was revised.

Delete Cl2 from condition 7.3.1.c.1.v.

Change "acid plant scrubber" in condition 8.1.3. Changed to "fume scrubber 1C".
Include recordkeeping requirement from 40 CFR §63.11125(d). Condition 12.4.1. was revised to include this.

USEPA comments:

Condition 7.3. did not require subsequent testing and scrubber parameters should be added to the permit.

DAQ noted Condition 7.2.1.a.1. required subsequent testing and applicable 40 CFR 63 Subpart CCC requirements on operation and maintenance will be sufficient to demonstrate compliance.

Condition 8.1.3. requirements for good air pollution control procedures suggest that the facility should develop an O&M plan.

DAQ noted similar requirements in MACT language that do not require developing O&M plans and deems existing recordkeeping requirements as sufficient to demonstrate compliance.

Condition 9.1.3. requirements for operating and maintaining fuel burning units to minimize emissions suggest that the facility should develop an O&M plan.

DAQ noted requirement is from a SIP'd rule and that similar requirements in MACT language do not require developing O&M plans.

Condition 9.1.5. does not list the weight emission standards for SO_2.

DAQ noted the SO_2 emission standard is streamlined with Condition 9.1.7.e. which requires burning pipeline quality natural gas. The margin of compliance for SO_2 is large and compliance will be met by burning pipeline quality natural gas.

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West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13-3075

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
ArcelorMittal-Weirton, LLC
Weirton
029-00001

John A. Benedict
Director

Issued: August 13, 2013

ENTIRE DOCUMENT
NON-CONFIDENTIAL

Facility Location:	100 Pennsylvania Avenue Weirton, Hancock County, West Virginia
Mailing Address:	100 Pennsylvania Avenue Weirton, WV 26062
Facility Description:	Finishing Steel Mill
NAICS Codes:	331111
UTM Coordinates:	534.3 km Easting • 4,474.6 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	Replacement of Boilers 3, 4, & 5 with five package units.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Table of Contents

1.0. Emission Units **4**

2.0. General Conditions **5**
2.1. Definitions 5
2.2. Acronyms 5
2.3. Authority 6
2.4. Term and Renewal 6
2.5. Duty to Comply 6
2.6. Duty to Provide Information 6
2.7. Duty to Supplement and Correct Information 7
2.8. Administrative Update 7
2.9. Permit Modification 7
2.10 Major Permit Modification 7
2.11. Inspection and Entry 7
2.12. Emergency 8
2.13. Need to Halt or Reduce Activity Not a Defense 8
2.14. Suspension of Activities 8
2.15. Property Rights 9
2.16. Severability 9
2.17. Transferability 9
2.18. Notification Requirements 9
2.19. Credible Evidence 9

3.0. Facility-Wide Requirements **10**
3.1. Limitations and Standards 10
3.2. Monitoring Requirements 10
3.3. Testing Requirements 10
3.4. Recordkeeping Requirements 11
3.5. Reporting Requirements 12

4.0. Source-Specific Requirements **14**
4.1. Limitations and Standards 14
4.2. Monitoring Requirements 15
4.3. Testing Requirements 15
4.4. Recordkeeping Requirements 15
4.5. Reporting Requirements 16

CERTIFICATION OF DATA ACCURACY **18**

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity (MMBtu/hr)	Control Device
089	S405	High Pressure Boiler 3	1940	540	None
090	S406	High Pressure Boiler 4	1947	540	None
091	S407	High Pressure Boiler 5	1952	600	None
108	S108	Strip Mill Boiler 1	2013	99	Low-NOx Burners
110	S110	Tin Mill Boiler 1	2013	99	Low-NOx Burners
111	S111	Tin Mill Boiler 2	2013	99	Low-NOx Burners
112	S112	Tin Mill Boiler 3	2013	99	Low-NOx Burners
113	S113	Tin Mill Boiler 4	2013	99	Low-NOx Burners

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
dscm	Dry Standard Cubic Meter
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MDHI	Maximum Design Heat Input
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 µm in diameter
PM_{10}	Particulate Matter less than 10µm in diameter
Ppb	Pounds per Batch
Pph	Pounds per Hour
Ppm	Parts per Million
Ppm_V or ppmv	Parts per Million by Volume
PSD	Prevention of Significant Deterioration
Psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

	Standards	**VOL**	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.3.2. 45CSR14 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration;*

2.3.3. 45CSR19 – *Requirements for Pre-Construction Review, Determination of Emission Offsets for Proposed New or Modified Stationary Sources of Air Pollution and Emission Trading for Intrasource Pollutants.*

2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3075, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the

permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[**45CSR§4.** ***State Enforceable Only.***]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance
(3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4:

a. CO emissions emitted to the atmosphere from each boiler shall not exceed 3.69 pounds per hour with an annual rate not to exceed 16.2 tpy. Compliance with this limit shall be satisfied by optimization of the CO concentration to no greater than 50 ppm during the tune-up as required in item c of this condition.

b. NO_x emissions emitted to the atmosphere from each boiler shall not exceed 3.64 pounds per hour with an annual rate not to exceed of 16.0 tons per year. Compliance with this limit is by verifying the manufacture's NOx emission setting and/or specification during the tune-up of the unit.

c. An annual tune-up with the first tune-up for each unit required to completed by not later than 13 months after the initial startup of each unit in accordance with the applicable requirements of 40 CFR 63, Subpart DDDDD. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. Subsequent tune-ups shall be no more than 13 months after previous tune-up and shall consist of the following

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, which includes the manufacturer's NOx concentration specification of 30 ppm;

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and maintain records containing the following information. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of each unit and a description of any corrective actions taken as a part of the tune-up.

[40 CFR §63.7500(a)(1), §63.7505(a), §63.7515(d), §63.7540(a)(10), and Table 3 to Subpart DDDDD of Part 63—Work Practice Standards]

d. Each boiler shall only be fired with pipeline quality natural gas. This condition satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.

e. Each boiler shall be designed or constructed with a maximum design heat input of 99.9 MMBtu/hr. Compliance with this limit at each boiler shall be satisfied by limiting the annual consumption of natural gas to 857.6 MM cubic feet, measured as a rolling yearly total. **[45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]**

4.1.2. The permittee shall permanently decommission one of Boilers 3, 4, and 5 within 180 days from the initial startup of any one of the replacement boilers (Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4). The permittee shall permanently decommission Boilers 3, 4, and 5 within 180 days from the initial startup of all five of the replacement boilers (Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4).
[45 CSR §14- 2.46h.]

4.1.3. The permittee shall conduct a one-time energy assessment of the facility which shall include boilers listed in Table 1.0. of this permit, unless the unit has be already been decommissioned, as specified in Table 3 of 40 CFR 63 Subpart DDDDD. Pursuant to 40 CFR §63.7510(e), the energy assessment shall be completed not later than January 31, 2016.
[40 CFR §63.7500(a)(1), §63.7505(a), and Table 3 of 40 CFR 63 Subpart DDDDD]

4.1.4. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. For each month, the permittee shall record the hours of operation and amount of natural gas consumed by the each boiler and shall calculate the rolling yearly total of natural gas consumed. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.
[40CFR§60.48c(g)(2) and 45CSR§2A-7.1.a.1.]

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. The permittee shall keep the following records in accordance with 40CFR§63.7555. This includes but not limited to the following information during the tune up as required in Condition 4.1.1.c. and 40 CFR §63.7540:

a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. If concentrations of NO_x were taken during the tune-up of the unit, record of such measurements shall be included;

b. A description of any corrective actions taken as a part of the tune-up; and

c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[40 CFR §§63.7540(a)(10)(vi) and 63.7555]

4.5. Reporting Requirements

4.5.1. The permittee shall submit an "Initial Notification" to the Director of the initial start-up of The following conditions and requirements are specific to Strip Mill Boiler 1, Tin Mill Boilers 1, 2, 3, and 4 within 15 days after the actual date of start-up. This Initial Notification supersedes the notification requirements of Condition 2.18.

[40CFR§§63.7545(c), 60.48(a), 60.7]

4.5.2. The permittee shall submit annual "Compliance Reports" to the Director with the first report being submitted by no later than January 31, 2017 and subsequent reports submitted by no later than January 31 of the following year. Such reports shall contain the information specified in 40 CFR §§63.7550(c)(5) (i)through (iv) and (xiv) which are:

a. Permittee and facility name, and address;
b. Process unit information emission limitations, and operating limitations;
c. Date of report and beginning and ending dates of the reporting period;
d. The total operating time during the reporting period of each affected unit;
e. Include the date of the most recent tune-up for each boiler; and
f. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

[40CFR §§63.7550(a)-(c)]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Chemours – Belle

54-039-00001

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west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
(304) 926-0475

Austin Caperton, Cabinet Secretary
dep.wv.gov

August 3, 2018

CERTIFIED MAIL
91 7199 9991 7038 4085 1824

Mr. Timothy L. Byrd
Plant Manager
901 W. DuPont Avenue
Belle, WV 25015

RE: Title V Operating Permit
The Chemours Company FC, LLC
Belle Plant
R30-03900001-2018 (Group 1 of 5)

Dear Mr. Byrd:

Enclosed please find the Final Title V Operating Permit for The Chemours Company FC, LLC's Belle Plant (Group 1 of 5). This permit is issued in accordance with the West Virginia Air Pollution Control Law (WV Code § 22-5-1 et. seq.) and legislative rules promulgated thereunder, including 45CSR30.

Operation of this facility shall be in accordance with all terms, conditions, and limitations of this permit. Should you wish to make a modification to this process or facility, it will be necessary to submit an application for a preconstruction permit and an application for a revision of this Title V Operating Permit.

Please note that this permit expires on July 31, 2023. A new permit application must be submitted six months prior to this date in order to renew this permit.

If you have any questions or need any further assistance, please feel free to contact the permitting engineer, Mike Egnor, at 304-926-0499 ext. 1208.

Sincerely,

Sandra Adkins

Sandra Adkins
Permitting

c: Michelle Young (via email)

West Virginia Department of Environmental Protection

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

The Chemours Company FC, LLC
Belle Plant
R30-03900001-2018 (1 of 5)

William F. Durham
Director, Division of Air Quality

Issued: July 31, 2018 • Effective: August 14, 2018
Expiration: July 31, 2023 • Renewal Application Due: January 31, 2023

Permit Number: **R30-03900001-2018 (1 of 5)**
Permittee: **The Chemours Company FC, LLC**
Facility Name: **Belle Plant**
Permittee Mailing Address: **901 West DuPont Avenue, Belle, WV 25015**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Belle, Kanawha County, West Virginia
Facility Mailing Address:	901 West DuPont Avenue, Belle, WV 25015
Telephone Number:	(304) 357-1000
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of various organic and agricultural chemicals.
SIC Codes:	2869, 2879
UTM Coordinates:	451.90 km Easting • 4232.60 km Northing • Zone 17

Permit Writer: Mike Egnor

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 4

2.0. General Conditions 6

3.0. Facility-Wide Requirements and Permit Shield 15

Source-specific Requirements

4.0. Wastewater Treatment Plant 21

5.0. Powerhouse 23

6.0. Fire Water Pumps 29

7.0. Gasoline Fuel Tank 32

APPENDIX A: CO-R40-C-2016-30 33

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Wastewater Treatment Plant					
601.011	00P-01	WTP Sulfuric Acid Tank – 93% sulfuric acid for wastewater treatment system.	Replaced 2012	15,000 gallons	None
601.010	00P-02	WTP Phosphoric Acid System – 35-40% phosphoric acid stored in tote bins.	Replaced 2008	N/A	None
601.012	00P-03	Waste Collection Tank	2011	16,500 gallons	None
601.100	00P-04	WAS Lime Silo and Dust Collector - calcium for calcium oxide used to aid in sludge stabilization. Dust collector and lime silo is a combined unit.	1992 (IDLE)	75,000 pounds	Combined Unit
600.304	00P-08	Wastewater Equalization Tank	Replaced 2012	1.5 million gallons	None
601.305	00P-09	South Waste Collection Sump	2015	3,500 gallons	None
Powerhouse					
00B-01	Boiler 6	Boiler 6 - 450 pound superheated steam-generating boiler.	1940	240 MMBtu/hr 150,000 lb/hr	None
00B-02	Boiler 10	Boiler 10 - 450 pound superheated steam-generating boiler.	1945	275 MMBtu/hr 200,000 lb/hr	None
00B-03	Boiler 14	Boiler 14 - 450 pound superheated steam-generating boiler.	1941	240 MMBtu/hr 150,000 lb/hr	None
00B-04	Boiler 15	Boiler 15 - 450 pound saturated steam-generating boiler.	1944	240 MMBtu/hr 150,000 lb/hr	None
Fire Pumps					
FP#1	FP#1	Diesel Engine for Fire Water Pump	2018	755 MBHP	None
FP#4D	FP#4D	Diesel Engine for Fire Water Pump	1993	800 MBHP	None
Gasoline Storage Tank					
GST	OOU	Underground Gasoline Storage Tank	1989	8,000 gal	None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1567A	September 6, 2002

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and

are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. Part 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.2. Monitoring Requirements

N/A

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the

reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

N/A

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

N/A

4.0 Wastewater Treatment Plant

4.1. Limitations and Standards

4.1.1. The emission of calcium oxide (lime) particulate matter from vent number 601.100 shall not exceed 5.4 lb/hr or 64.8 lb/yr.
[45CSR13, Permit No. R13-1567 (Condition A.1.)] ***Compliance with this streamlined limit assures compliance with 45CSR§7-4.1. (00P-04)***

4.1.2. The emission of ammonia from the WAS Stabilized Sludge Container (00P-03) shall not exceed 0.5 lb/hr.
[45CSR13, Permit No. R13-1567 (Condition A.2.)]*(00P-03)*

4.1.3. In order to maintain compliance with the yearly emission rate specified in 4.1.1., lime usage shall not exceed 54 tons per month.
[45CSR13, Permit No. R13-1567 (Condition B.1.)]*(00P-04)*

4.1.4. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 45CSR§7-5.1. is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7.]*(00P-04)*

4.1.5. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained, and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]*(00P-03, 00P-04)*

4.2. Monitoring Requirements

4.2.1. Compliance with the calcium oxide (lime) particulate matter limitations shall be demonstrated by monitoring lime usage, as well as proper operation and maintenance of the dust collection system. Monitoring of lime usage is only required if this unit has been operated in any day of the calendar month.
[45CSR§30-5.1.c.]*(00P-04)*

4.2.2. In order to maintain compliance with the ammonia limits of 4.1.2., ammonia monitoring using colorimetric detector tubes shall be performed at the WAS Sludge Blender exit. The monitoring shall be done monthly, and only during times when the sludge is being processed through the blender.
[45CSR13, Permit No. R13-1567 (Condition B.2.)]*(00P-03)*

4.2.3. At least monthly, visible emission checks of each emission point subject to an opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 C.F.R. 60, Appendix A, Method 22. For the WAS Lime Silo (00P-04), visible emission checks are only required if the silo was operated any day during the month.
[45CSR§30-5.1.c.]*(00P-03, 00P-04)*

4.3. Testing Requirements

4.3.1. The permittee shall practice the proper operation of the dust collection system, which includes conducting pressure drop measurements on a semi-annual basis. This measurement is only required if the silo was operated any day during the semi-annual basis.

[45CSR§30-5.1.c.]*(00P-04)*

4.3.2. If sources of visible emissions are identified during the survey (as required in 4.2.3.), or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§§7A-2.1.a. & 2.1.b., within twenty-four (24) hours. A 45CSR§§7A-2.1.a. & 2.1.b. evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions.
[45CSR§30-5.1.c.]*(00P-03, 00P-04)*

4.4. Recordkeeping Requirements

4.4.1. The permittee shall keep records of lime usage and maintenance records of the dust collection system.
[45CSR§30-5.1.c.]*(00P-04)*

4.4.2. The permittee shall keep records of the colorimetric monitoring data.
[45CSR§30-5.1.c.]*(00P-03)*

4.4.3. The Permittee shall keep records of each visible emission check required in 4.2.3. Said records shall include the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
[45CSR§30-5.1.c.]*(00P-03, 00P-04)*

4.5. Reporting Requirements

N/A

4.6. Compliance Plan

N/A

5.0 Powerhouse

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1]

5.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amounts as follows:

Boiler	Heat Input (MMBtu/hr)	PM Limit (lb/hr)
#6	240	21.6
#10	275	24.75
#14	240	21.6
#15	240	21.6

[45CSR§2-4.1.b.]

5.1.3. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4.]

5.1.4. The visible emission standards set forth in 45CSR§2-3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1.]

5.1.5. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source.
[45CSR§2-9.2.]

5.1.6. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

Boiler	Heat Input (MMBtu/hr)	SO_2 Limit (lb/hr)
#6	240	384
#10	275	440
#14	240	384
#15	240	384

[45CSR§10-3.2.c.]

5.1.7. For Boiler #10 (00B-02), the Permittee shall comply with Appendix B (CO-R40-C-2016-30) along with Condition 5.4.2.
[45CSR§§40-4.1 and 5.1.]

5.1.8. For Boilers 6, 10, 15, and 14, the Permittee must conduct an annual tune-up of the boilers to demonstrate continuous compliance as specified below:

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) through (C) of this condition,

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[45CSR34; 40CFR§§63.7500(a)(1) and 63.7540(a)(10) and Table 3(3)]

5.1.9. The Permittee must operate and maintain Boilers 6, 10, 14, and 15, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40 C.F.R. §63.7500(a)(3)]

5.2. Monitoring Requirements

N/A

5.3. Testing Requirements

N/A

5.4. Recordkeeping Requirements

5.4.1. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
[45CSR§2-8.3.c.]

5.4.2. For Boiler #10 (00B-02), the Permittee shall operate certified continuous emission monitoring systems necessary to attribute ozone season NO_x mass emission limits in accordance with 40 CFR Part 75, Subpart H. NO_x mass emission measurements recorded and reported in accordance with 40 CFR Part 75, Subpart H shall be used to determine the Boiler's compliance with the ozone season NO_x emission limitation given in Condition 5.1.7.
[45CSR§40-6.1.]

5.4.3. The Permittee must keep records according to paragraphs (1) and (2) of this condition.

(1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[45CSR34; 40 C.F.R. §63.7555(a)]

5.4.4. Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD

(a) The Permittee must keep records in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), The Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) The Permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[45CSR34; 40 C.F.R. §§63.7560(a), (b), and (c)]

5.5. Reporting Requirements

5.5.1. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 5.5.1.a., by telephone, telefax, or email by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date and time of duration (with starting and ending times) of the period of excess emissions;

3. An estimate of the mass of excess emissions discharged during the malfunction period;

4. The maximum opacity measured or observed during the malfunction;

5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

5.5.2. The Permittee must report each instance in which the Permittee did not meet each work practice standard in Table 3 to 40 C.F.R. 63 Subpart DDDDD that applies (Condition 5.1.8). These instances are deviations

from the work practice standards in 40 C.F.R. 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 C.F.R. §63.7550 (Condition 5.5.3.).
[45CSR34; 40 C.F.R. §63.7540(b)]

5.5.3. The Permittee must submit a Compliance report containing the information in paragraphs a. and b. of this Condition, and in accordance with paragraphs c. and d. of this Condition.

a. The information in §63.7550(c)(5)(i) through (iii), (xiv), and (xvii) which is:

(i) Company and Facility name and address.
(ii) Process unit information, emissions limitations, and operating parameter limitations.
(iii) Date of report and beginning and ending dates of the reporting period.
(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 C.F.R. §63.7540(a)(10). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
(xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart DDDDD that apply (Condition 5.1.8), a statement that there were no deviations from the work practice standards during the reporting period.

c. The Permittee must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 and ending after the compliance date that is specified for the boilers in 40 C.F.R. §63.7495.

(2) The first annual compliance report must be postmarked or submitted no later than January 31.

(3) Each subsequent annual compliance report must cover the 1-year period from January 1 to December 31.

(4) Each subsequent annual compliance report must be postmarked or submitted no later than January 31.

d. The Permittee must submit all reports required by Table 9 of 40 C.F.R. 63 Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 C.F.R. 63 Subpart DDDDD is not available in CEDRI at the time that the report is due the report you must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. At the discretion of the Administrator, you must also submit these reports, to the Administrator in the format specified by the Administrator.

[45CSR34; 40 C.F.R. §§63.7550(a), (b), and (c)(1); 40 C.F.R. §63.7550(h)(3)]

5.6. Compliance Plan

N/A

6.0 Fire Water Pumps

6.1. Limitations and Standards

6.1.1. For the Fire Water Pumps FP#1 and FP#4D, the Permittee must operate the emergency stationary RICE according to the requirements in paragraphs (i) through (iii) of this Condition. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii) of this Condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (i) through (iii) of this Condition, the engine will not be considered an emergency engine under 40CFR63, Subpart ZZZZ and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) The Permittee may operate the emergency stationary RICE for up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
[45CSR34; 40CFR§§63.6640(f)(1), (f)(2)(i), and (f)(3) (FP#1 and FP#4D)]

6.1.2. For the Fire Water Pump FP#1, the Permittee must comply with the following emission standards:

NMHC + NO_x	PM
6.4 g/KW-hr or 4.8 g/HP-hr	0.20 g/KW-hr or 0.15 g/HP-hr

[45CSR16; 40CFR§60.4205(c) and 40CFR60, Subpart IIII Table 4 (FP#1)]

6.1.3. The Permittee shall operate and maintain Fire Water Pump FP#1 that achieve the emission standards given in Condition 6.1.2 over the entire life of the engine.
[45CSR16; 40CFR§60.4206 (FP#1)]

6.1.4. For Fire Water Pump FP#1, all NRLM (nonroad locomotive or marine) diesel fuel will be subject to the following per-gallon standards;
(1) Sulfur content:
(i) 15 ppm maximum for NR diesel fuel.
(ii) 500 ppm maximum for LM diesel fuel.
(2) Cetane index or aromatic content, as follows:
(i) A minimum cetane index of 40; or
(ii) A maximum aromatic content of 35 volume percent
[45CSR16; 40CFR§60.4207(b), 40CFR§80.510(b) (FP#1)]

6.1.5. If the Fire Water Pump FP#1 does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter prior to startup of the engine.
[45CSR16; 40CFR§60.4209(a) (FP#1)]

6.1.6. The Permittee shall purchase a fire pump engine (FP#1) certified to meet the emission standards in Condition 6.1.2. The engine must be installed and configured according to the manufacturer's emission-related specifications.
[45CSR16; 40CFR§60.4211(c) (FP#1)]

6.1.7. The Permittee must be in compliance with the emission limitations, operating limitations, and other requirements of 40CFR63, Subpart ZZZZ at all times. The Permittee must operate and maintain the Fire Water Pumps, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40CFR§63.6605 (FP#1 and FP#4D)]

6.1.8. The Permittee must operate the fire water pump engine (FP#1) according to the requirements in paragraphs (1) through (3) of this Condition. In order for the engine to be considered an emergency stationary ICE under 40CFR60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this Condition, is prohibited. If the Permittee does not operate the engine according to the requirements in paragraphs (1) through (3) of this Condition, the engine will not be considered an emergency engine under 40CFR60, Subpart IIII and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of the fire water pump engine in emergency situations.

(2) The Permittee may operate the fire water pump engine for any combination of the purposes specified in paragraph (2)(i) of this Condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this Condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) The fire water pump engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(3) The fire water pump engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) of this Condition.
[45CSR16; 40CFR§60.4211(f) (FP#1)]

6.2. Monitoring Requirements

N/A

6.3. Testing Requirements

N/A

6.4. Recordkeeping Requirements

6.4.1. As the fire water pump engine (FP#1) is an emergency stationary internal combustion engine, the Permittee is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to non-emergency engines, the Permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time.
[45CSR16; 40CFR§60.4214(b) (FP#1)]

6.5. Reporting Requirements

N/A

6.6. Compliance Plan

N/A

7.0 Gasoline Fuel Tank [emission unit ID(s): GST]

7.1. Limitations and Standards

7.1.1. All gasoline storage tanks shall be loaded by submerged fill.
[45CSR§21-23.2.a.1]

7.2. Monitoring Requirements

7.2.1. Compliance with condition 7.1.1. shall be verified upon inspection.
[45CSR§30-5.1.c.1.B]

7.3. Testing Requirements

7.3.1. None

7.4. Recordkeeping Requirements

7.4.1. The permittee shall maintain daily records showing the quantity of all gasoline delivered to the site. These records shall be retained for at least 3 years in a readily accessible location and shall be made available to the Director upon verbal or written request.
[45CSR§21-23.3]

7.5. Reporting Requirements

7.5.1. None

7.6. Compliance Plan

7.6.1. N/A

Appendix A

CO-R40-C-2016-30

SCANNED

dep

ID #_____
Reg_____
Company_____
Facility_____ Initials_____

west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
(304) 926-0475

FILE COPY

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

COMPLIANCE ORDER
ISSUED UNDER THE
AIR POLLUTION CONTROL ACT
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 5, SECTION 4

TO: The Chemours Company FC, LLC
c/o Mr. Timothy L. Byrd
901 West Dupont Avenue
Belle, WV 20755

DATE: ~~December 1, 2016~~ January 4, 2017
ORDER NO.: CO-R40-C-2016-30
FACILITY ID NO.: 039-00001

INTRODUCTION

This Consent Order is issued by the Director of the Division of Air Quality (hereinafter, "Director"), under the authority of West Virginia Code, Chapter 22, Article 5, Section 1 et seq. to The Chemours Company FC, LLC ("Chemours and/or Company").

FINDINGS OF FACT

In support of this Order, the Director hereby finds the following:

1. Chemours operates a chemical facility that includes a 275 mmBtu/hr natural gas fired boiler ("Boiler 10") located in Belle, West Virginia.

2. Boiler 10 has a maximum design heat input greater than 250 mmBtu/hr and is not subject to the federal Cross-State Air Pollution Rule ("CSAPR") NOx Ozone Season Trading Program established under 40 CFR Part 97, Subpart BBBBB, or an equivalent trading program established under regulations approved as a state implementation plan revision pursuant to 40 CFR §52.38(b)(5).

3. Chemours is subject to 45 C.S.R. 40, *Control of Ozone Season Nitrogen Oxides Emissions*, because they meet applicability requirement §4.1, which states "The owner or operator of a unit that has a maximum design heat input greater than 250 mmBtu/hr, except for any unit subject to the federal Cross-State Air Pollution Rule NOx Ozone Season Trading

Promoting a healthy environment.

Program established under 40 CFR Part 97, Subpart BBBBB, or an equivalent trading program established under regulations approved as a state implementation plan revision pursuant to 40 CFR §52.38(b)(5), shall comply with the ozone season NOX emission limitation, and monitoring, recordkeeping and reporting requirements for ozone season emissions of NOX set forth in sections 5 and 6."

4. This Order does not make any finding of violation against The Chemours Company.

ORDER FOR COMPLIANCE

Now therefore, in accordance with Chapter 22, Article 5, Section 1 et seq. of the West Virginia Code, it is hereby agreed between the parties and ORDERED by the Director:

1. Chemours shall limit emissions of NO_x to a maximum of 0.20 lb/MMBtu during the NOx ozone season (May 1 through September 30 each year), specifically for Boiler 10.

2. Chemours shall comply with the ozone season NOx emission limitation and the monitoring, recordkeeping, and reporting requirements for ozone season emissions of NOx set forth in 45CSR40 "**Control Of Ozone Season Nitrogen Oxides Emissions**", Section 6, which states "The owner or operator of an applicable unit under subsection 4.1 shall operate certified continuous emission monitor ("CEMs") systems necessary to attribute ozone season NOx mass emissions to each unit, in accordance with 40 CFR Part 75, Subpart H. NOx mass emissions measurements recorded and reported in accordance with 40 CFR Part 75, Subpart H shall be used to determine a unit's compliance with the ozone season NOx emission limitation". Chemours shall comply with all provisions set forth in 40 CFR Part 75 for the NOx CEMs.

3. If the Company fails to complete any of the requirements contained in this Order to the reasonable satisfaction of the Director or within the time limits set forth herein, the Director may order the Company to pay a stipulated penalty of one thousand dollars ($1,000.00) per day to the Air Pollution Education and Environment Fund for each day that the action remains incomplete. The Director shall first notify the Company in writing that the facility is in violation of the terms of conditions of the Order, and the stipulated penalty shall then become immediately due and payable. Payments made pursuant to this paragraph are not tax-deductible expenditures for purposes of State or federal law.

OTHER PROVISIONS

1. Chemours hereby waives its right to appeal this Order under the provisions of Chapter 22, Article 5, Section 1 of the Code of West Virginia. Under this Order Chemours agrees to take all actions required by the terms and conditions of this Order and consents to and will not contest the Director's jurisdiction regarding this Order. However, Chemours does not admit to any factual and legal determinations made by the Director and reserves all rights and defenses available regarding liability or responsibility in any proceedings regarding Chemours other than proceedings, administrative or civil, to enforce this Order.

2. If any event occurs which causes delay in the achievement of the requirements of this Order. Chemours shall have the burden of proving that the delay was caused by circumstances beyond its reasonable control which could not have been overcome by due diligence (i.e., force majeure). Force majeure shall not include delays caused or contributed to by the lack of sufficient funding. Within three (3) working days after Chemours becomes aware of such a delay, notification shall be provided to the Director and shall, within ten (10) working days of initial notification, submit a detailed written explanation of the anticipated length and cause of the delay the measures taken and/or to be taken to prevent or minimize the delay, and a timetable by which Chemours intends to implement these measures. If the Director agrees that the delay has been or will be caused by circumstances beyond the reasonable control of Chemours (i.e., force majeure), the time for performance hereunder shall be extended for a period of time equal to the delay resulting from such circumstances. A force majeure amendment granted by the Director shall be considered a binding extension of this Order and of the requirements herein. The determination of the Director shall be final and not subject to appeal.

3. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Chemours of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Chemours to additional penalties and injunctive relief in accordance with the applicable law.

4. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.

5. This Order is binding on Chemours, its successors and assigns.

The Chemours Company FC, LLC — Date: 01/04/2017

William F. Durham, Director
Division of Air Quality — Date: 12-01-2016

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west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
(304) 926-0475

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

COMPLIANCE ORDER
ISSUED UNDER THE
AIR POLLUTION CONTROL ACT
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 5, SECTION 4

TO: The Chemours Company FC, LLC
c/o Mr. Timothy L. Byrd
901 West Dupont Avenue
Belle, WV 20755

DATE: December 1, 2016
ORDER NO.: CO-R40-C-2016-30
FACILITY ID NO.: 039-00001

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FINDINGS OF FACT

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1. Chemours operates a chemical facility that includes a 275 mmBtu/hr natural gas fired boiler ("Boiler 10") located in Belle, West Virginia.

2. Boiler 10 has a maximum design heat input greater than 250 mmBtu/hr and is not subject to the federal Cross-State Air Pollution Rule ("CSAPR") NOx Ozone Season Trading Program established under 40 CFR Part 97, Subpart BBBBB, or an equivalent trading program established under regulations approved as a state implementation plan revision pursuant to 40 CFR §52.38(b)(5).

3. Chemours is subject to 45 C.S.R. 40, *Control of Ozone Season Nitrogen Oxides Emissions,* because they meet applicability requirement §4.1, which states "The owner or operator of a unit that has a maximum design heat input greater than 250 mmBtu/hr, except for any unit subject to the federal Cross-State Air Pollution Rule NOx Ozone Season Trading

Program established under 40 CFR Part 97, Subpart BBBBB, or an equivalent trading program established under regulations approved as a state implementation plan revision pursuant to 40 CFR §52.38(b)(5), shall comply with the ozone season NOX emission limitation, and monitoring, recordkeeping and reporting requirements for ozone season emissions of NOX set forth in sections 5 and 6."

4. This Order does not make any finding of violation against The Chemours Company.

ORDER FOR COMPLIANCE

Now therefore, in accordance with Chapter 22, Article 5, Section 1 et seq. of the West Virginia Code, it is hereby agreed between the parties and ORDERED by the Director:

1. Chemours shall limit emissions of NO_x to a maximum of 0.20 lb/MMBtu during the NOx ozone season (May 1 through September 30 each year), specifically for Boiler 10.

2. Chemours shall comply with the ozone season NOx emission limitation and the monitoring, recordkeeping, and reporting requirements for ozone season emissions of NOx set forth in 45CSR40 "**Control Of Ozone Season Nitrogen Oxides Emissions**", Section 6, which states "The owner or operator of an applicable unit under subsection 4.1 shall operate certified continuous emission monitor ("CEMs") systems necessary to attribute ozone season NOx mass emissions to each unit, in accordance with 40 CFR Part 75, Subpart H. NOx mass emissions measurements recorded and reported in accordance with 40 CFR Part 75, Subpart H shall be used to determine a unit's compliance with the ozone season NOx emission limitation". Chemours shall comply with all provisions set forth in 40 CFR Part 75 for the NOx CEMs.

3. If the Company fails to complete any of the requirements contained in this Order to the reasonable satisfaction of the Director or within the time limits set forth herein, the Director may order the Company to pay a stipulated penalty of one thousand dollars ($1,000.00) per day to the Air Pollution Education and Environment Fund for each day that the action remains incomplete. The Director shall first notify the Company in writing that the facility is in violation of the terms of conditions of the Order, and the stipulated penalty shall then become immediately due and payable. Payments made pursuant to this paragraph are not tax-deductible expenditures for purposes of State or federal law.

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2. If any event occurs which causes delay in the achievement of the requirements of this Order. Chemours shall have the burden of proving that the delay was caused by circumstances beyond its reasonable control which could not have been overcome by due diligence (i.e., force majeure). Force majeure shall not include delays caused or contributed to by the lack of sufficient funding. Within three (3) working days after Chemours becomes aware of such a delay, notification shall be provided to the Director and shall, within ten (10) working days of initial notification, submit a detailed written explanation of the anticipated length and cause of the delay the measures taken and/or to be taken to prevent or minimize the delay, and a timetable by which Chemours intends to implement these measures. If the Director agrees that the delay has been or will be caused by circumstances beyond the reasonable control of Chemours (i.e., force majeure), the time for performance hereunder shall be extended for a period of time equal to the delay resulting from such circumstances. A force majeure amendment granted by the Director shall be considered a binding extension of this Order and of the requirements herein. The determination of the Director shall be final and not subject to appeal.

3. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Chemours of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Chemours to additional penalties and injunctive relief in accordance with the applicable law.

4. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.

5. This Order is binding on Chemours, its successors and assigns.

The Chemours Company FC, LLC — Date: 01/04/2017

William F. Durham, Director
Division of Air Quality — Date: 12-01-2016

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54-049-00043

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NON CONFIDENTIAL

DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
1558 Washington Street, East
Charleston, WV 25311-2599

Gaston Caperton
Governor

John M. Ranson
Cabinet Secretary

David C. Callaghan
Director

Ann A. Spaner
Deputy Director

PERMIT TO CONSTRUCT, MODIFY, OR RELOCATE STATIONARY SOURCES OF AIR POLLUTANTS

PERMIT NO.: R13-1525 DATE: June 18, 1993

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (§16-20) AND ADMINISTRATIVE REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT THE SUBJECT FACILITY IN ACCORDANCE WITH THIS PERMIT.

Name of Permittee: American Power Recyclers, L. P.

Mailing Address: 33 Rock Hill Road
Bala Cynwyd, PA 19004-2010

Nearest City or Town: Montana Mines

County: Marion

Directions to Exact Location: From I-79 take the Prickett's Fort Exit. Follow secondary Route 72 North West to Montana Mines.

Type of Facility or Modification: Construction of a 500 ton per day office paper recycling facility including one natural gas fired boiler having a design heat input of 168 mm Btu/hr and a 60 mm Btu/hr pulp dryer.

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SPECIFIC REQUIREMENTS

(A) IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS THIS PERMIT IS LIMITED AS FOLLOWS:

(1) Maximum emissions to the atmosphere from emission point 1e (the 1s boiler vent) shall not exceed the following:

	lbm/hr
Particulate matter	0.51
Sulfur Dioxide	0.02
Volatile Organic Compounds	0.57
Nitrogen Oxides	20.27
Carbon Monoxide	25.33

(2) Maximum emissions to the atmosphere from emission point 2e (2s dryer vent) shall not exceed the following:

	lbm/hr
Particulate matter	4.28
Sulfur Dioxide	0.02
Volatile Organic Compounds	1.96
Nitrogen Oxides	5.82
Carbon Monoxide	3.99

(3) Continuous monitors shall be installed and maintained for the measurement of nitrogen oxides and oxygen concentrations at emission point 1e.

(4) This permit shall be deemed by the Chief of the Office of Air Quality to be terminated upon verification that the permittee shall construct an office paper recycling facility at Barrackville, WV in accordance with Office of Air Quality Permit R13-1525.

(5) There shall be no on-site disposal or composting of process sludge.

(B) OTHER REQUIREMENTS

(1) Enclosed with this permit is an Application for Certificate to Operate, from the date of initial startup through the following June 30. Said Application and the appropriate Fee shall be submitted to this agency no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a Fee or prorated Fee in accordance with the schedule in 45 CSR 22.4.5. A copy of this schedule may be found on the reverse side of the Application for Certificate to Operate.

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(2) The permitted facility shall comply with all applicable requirements of WVAPCC Regulation 2 provided, however, that compliance with any more stringent requirements under Paragraph A of this permit shall also be demonstrated.

(3) The permitted facility shall comply with WVAPCC Regulation XVI and 40 CFR 60, Subpart Db including the following:

(i) notification of the date construction is commenced, postmarked no later than thirty (30) days after such date

(ii) notification of the anticipated date of initial start-up, postmarked not more than sixty (60) days nor less than thirty (30) days prior to such date, and

(iii) notification of the actual date of initial start-up, postmarked within fifteen (15) days after such date.

(4) Testing to determine compliance with the above emission limitations (lbm/hr) set forth under Paragraphs (A)(1) and (A)(2) of this permit shall be conducted in accordance with EPA test methods set forth under Appendix A to Part 60, Title 40 of the Code of Federal Regulations as approved by the Chief. Prior to conducting such testing, the company shall submit as required in advance a testing protocol following guidelines set forth under WVAPCC 45CSR7A.

(5) The permitted facility shall not discharge air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.

GENERAL REQUIREMENTS

(1) In accordance with 45 CSR 22 - "Air Quality Management Fee Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate. Such Certificate to Operate shall be renewed annually, shall be maintained on the premises for which the Certificate has been issued, and shall be made immediately available for inspection by the Chief or his duly authorized representative.

(2) Possession of this permit does not relieve any person of the responsibility of complying with any and all applicable rules or regulations of the Commission or any other governmental agency.

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(3) The permitted facility must be constructed and operated in accordance with information filed in WVAPCC Permit Application No. 1525. The Chief may cancel or suspend a permit if the plans and specifications upon which the approval was based are not adhered to.

(4) At such reasonable time(s) as the Chief may designate, the permittee shall conduct or have conducted stack tests to determine compliance with the emission limitations established in the permit application and/or applicable WVAPCC regulations. Tests shall be conducted in such a manner as the Chief may specify or approve and must be filed in a manner acceptable to the Chief. The Chief, or his duly authorized representative, may at his option witness or conduct such stack test. Should the Chief exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Chief may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with general accepted good safety practices. For any tests to be conducted by the permittee, a test protocol must be submitted to the WVAPCC by the permittee at least thirty (30) days prior to the test and must be approved by the Chief. The Chief must be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

(5) THIS PERMIT IS NON-TRANSFERABLE.

ISSUED BY: G. DALE FARLEY
CHIEF

DATE: June 18, 1993

COVESTRO

54-051-00009

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Bayer MaterialScience LLC
New Martinsville Facility
R30-05100009-2013

John A. Benedict
Director

Issued: November 5, 2013 • Effective: November 19, 2013
Expiration: November 5, 2018 • Renewal Application Due: May 5, 2018

Permit Number: **R30-05100009-2013**
Permittee: Bayer MaterialScience LLC
Facility Name: New Martinsville Facility
Permittee Mailing Address: P.O. Box 500
New Martinsville, WV 26155

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 – Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Natrium, Marshall County, West Virginia
Facility Mailing Address:	P.O. Box 500 New Martinsville, WV 26155
Telephone Number:	304-455-4400
Type of Business Entity:	LLC
Facility Description:	The New Martinsville facility is an integrated chemical plant whose primary purpose is to produce isocyantes, polyesters, polyethers, and acrylics. The majority of the production units in this plant are involved with the production of polyurethane products (isocyantes and polyols).
SIC Codes:	2869; 2821; 2819
UTM Coordinates:	514.50 km Easting • 4397.50 km Northing • Zone 17

Permit Writer: Mike Egnor

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 19

3.0. Facility-Wide Requirements and Permit Shield 28

Source-specific Requirements

4.0. Boiler House #2 37

5.0. Environmental Control Department 41

6.0. HCl and SL 55

7.0. Polyols 57

8.0. Texin 79

9.0. MPP 82

10.0. SPU 83

11.0. Material Handling Department 87

Appendix A (45CSR2 Monitoring Plan) 91
Appendix B (45CSR10 Monitoring Plan) 106
Appendix C (Certification of Data Accuracy) 117

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Boiler House #2					
9300-648	022	Boiler #9 - Produces 670 pound steam	1971	246.2 MM BTU/hr	N/A
9300-501	022	Boiler #10 - Produces 670 pound steam	1971	171.0 MM BTU/hr	N/A
9300-720	022	Boiler #11- Produces 670 pound steam	2007	98.0 MM BTU/hr	N/A
ECD					
033-121	011	TDI Residue Silo	1986	270 tons	033-021
033-172	011	Bed Sand Silo	1993	35 tons	N/A
033-220	011	Sulfur Silo	2002	5,000 lbs	033-221
033-205	011	PAC silo	2000	80,000 lb	033-207
033-162	011	Aqueous burning tank	1991	23,000 gal	033-162c 9100-525
033-197	011	Wastewater Storage Tank	1998	18,500 gal	033-197c
033-198	011	Wastewater Storage Tank	1998	18,500 gal	033-198c
033-019	011	TDI Residue Feed Silo	1986	1,900 ft^3	PB15 033-021
033-001	011	Sludge Tank	1986	2,000 gal	9100-525
033-037	011	Diesel Fuel Tank	1986	1,000 gal	N/A
9100-021	011	Neutralization Basin	1973	100,000 gal	N/A
9100-703 9100-705	011	Neutralization Tanks (2)	1996	21,225 gal ea.	N/A
9100-583	011	Primary Clarifier Suck Tank	1973	22,000 gal	N/A
9100-030	011	Primary Clarifier	1973	1 MM gal	N/A
9100-584 9100-585	011	Equalization Tanks (2)	1987	2.5 MM gal ea.	N/A
9100-063.1 9100-063.2	011	Biox Tanks (2)	1973	1 MM gal ea.	N/A
9100-509	011	Secondary Clarifier Feed Tank	1973	4,700 gal	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
9100-067	011	Secondary Clarifier	1973	1 MM gal	N/A
9100-074	011	Carbon Treat Feed Tank	1973	4,700 gal	N/A
9100-762	011	Effluent Diffuser Head Tank	1997	85,000 gal	N/A
9100-092.1 9100-092.2 9100-523	011	Carbon Towers (3)	1973 1973 1988	11,450 ft^3 ea.	N/A
9100-734	011	Emergency Spill Tank	1995	100,000 gal	N/A
9100-630	011	RCRA Sump Pit Tank	1987	2,233 gal	N/A
9100-002	011	Caustic Tank	1973	80,000 gal	N/A
9100-042	011	Phosphoric Tank	1983	3,000 gal	N/A
033-040	011	Fluidized Bed Incinerator	1986	43 MM BTU/hr	033-070 033-083
9100-772	011	FBI Waste Tank	2007		N/A
HCL and SL					
5300-648	015	HCL Tank 1501	2000	1 MM gal	5300-052
5300-021	015	HCL Tank 1502	1966	2 MM gal	5300-624
5300-545	015	HCL Tank 1503	1980	1 MM gal	5300-701
15NN	15NN	Loading Rack	1980	NA	Scrubber 9950-515
15OO	15OO	Loading Rack	1980	NA	Scrubber 9950-515
Polyols					
011-001.1	No Vent Pressurized	PO Tank (STV32A) – pressurized no vent	1970	27,000 gallons	
011-001.2	No Vent Pressurized	PO Tank (STV33A) – pressurized no vent	1970	27,000 gallons	
011-005	No Vent Pressurized	PO Tank (STV34) – pressurized no vent	1970	27,000 gallons	
011-010	EP10	EDA Tank (STV44)	1969	6,000 gallons	
011-015	EP6	RM Tank (STV40)	1969	16,560 gallons	
011-019	EP13	Sulfuric Tank (STV47)	2000	6,000 gallons	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-137	EP9	RM Tank STV45	1974	7,000 gallons	
011-140	No Vent Pressurized	Freon Tank (STV37) pressurized no vent	1973	6,600 gallons	
011-160.1	EP11	RM Tank STV45	1972	20,000 gallons	
011-160.2	EP12	RM Tank STV46	1972	20,000 gallons	
011-163.2	EP54	RM Tank (PVP54) terate	1972	12,000 gallons	
011-513	EP14	RM Tank (STV48) KOH	1975	18,500 gallons	
011-540	EP7	RM Tank (STV41) Fyrol	1979	10,000 gallons	
011-543	EP4	RM Tank (STV38) Niax	1979	10,000 gallons	
011-569	EP5	RM Tank (STV39) PG	1975	10,000 gallons	
011-735	EP8	RM Tank (STV42) o-TDA	1987	12,800 gallons	
011-857	EP41	RM Tank (STV38) TXIB	1994	10,000 gallons	
011-605	No Vent Pressurized	Tank	1969	15,000 gallons	
011-798	No Vent Pressurized	Tank	1990	6,500 gallons	
011-102.1	STV76	Tank	1997	6,000 gallons	
011-789	EP55	Sugar Hopper	1991	185 ft^3	
011-790	EP56	Sugar Hopper	1991	185 ft^3	
011-1176	EP59	Carbon Black Paste Tank	2000	6,000 gal	
011-081	EP60	Cold Glycol Tank	1969	1,500 gal	
011-012	EP61	Hot Glycol Tank	1969	500 gal	
011-087.1	EP15	FG Tank (STV1)	1969	20,000 gal	
011-087.2	EP16	FG Tank (STV2)	1969	20,000 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-087.3	EP17	FG Tank (STV3)	1969	20,000 gal	
011-087.4	EP18	FG Tank (STV4)	1969	20,000 gal	
011-087.5	EP19	FG Tank (STV5)	1969	20,000 gal	
011-087.6	EP20	FG Tank (STV6)	1969	20,000 gal	
011-087.7	EP21	FG Tank (STV7)	1969	20,000 gal	
011-087.8	EP22	FG Tank (STV8)	1969	20,000 gal	
011-087.9	EP23	FG Tank (STV9)	1969	20,000 gal	
011-087.10	EP24	FG Tank (STV10)	1969	20,000 gal	
011-087.11	EP25	FG Tank (STV11)	1969	20,000 gal	
011-087.12	EP26	FG Tank (STV12)	1969	20,000 gal	
011-087.13	EP27	FG Tank (STV13)	1969	20,000 gal	
011-087.14	EP28	FG Tank (STV14)	1969	20,000 gal	
011-087.15	EP29	FG Tank (STV15)	1969	20,000 gal	
011-086.1	EP30	FG Tank (STV16)	1973	80,000 gal	
011-086.2	EP31	FG Tank (STV17)	1969	80,000 gal	
011-086.3	EP32	FG Tank (STV18)	1969	80,000 gal	
011-086.4	EP33	FG Tank (STV19)	1973	80,000 gal	
011-086.5	EP34	FG Tank (STV20)	1973	80,000 gal	
011-086.6	EP35	FG Tank (STV21)	1973	80,000 gal	
011-086.7	EP36	FG Tank (STV22)	1973	80,000 gal	
011-170.1	EP37	FG Tank (STV23)	1973	300,000 gal	
011-593	EP38	FG Tank (STV24)	1982	20,000 gal	
011-630	EP39	FG Tank (STV25)	1982	160,000 gal	
011-742	EP40	FG Tank (STV26)	1988	25,000 gal	
011-163.1	EP47	Filter Feed Tank	1969	12,000 gal	
011-056.1A/B	EP48	Evaporative Feed Tank	1969	10,000 gal	
011-060.1A/B	EP49	Product Hold Tank	1969	10,000 gal	
011-056.2A	EP50	Product Hold Tank	1969	5,000 gal	
011-056.2B	EP51	Product Hold Tank	1969	5,000 gal	
011-060.2A	EP52	Product Hold Tank	1969	5,000 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-060.2B	EP53	Product Hold Tank	1969	5,000 gal	
011-845	EP57	Wastewater Tank	1996	6,565 gal	
011-850	EP58	Wastewater Tank	1996	6,565 gal	
011-027.1	EP1	#1 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.2	EP1	#2 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.3	EP1	#3 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.4	EP1	#4 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.5	EP1	#5 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.6	EP1	#6 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.9	EP1	#9 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-027.10	EP1	#10 Polyol Reactor (PVP57)	1986	4,250 gal	Scrubber 011-1159
011-034.1	EP1	#1 Neutralizer	1969	4,300 gal	Scrubber 011-1159
011-034.2	EP1	#2 Neutralizer	1969	4,300 gal	Scrubber 011-1159
011-034.3	EP1	#3 Neutralizer	1969	4,300 gal	Scrubber 011-1159
011-034.4	EP1	#4 Neutralizer	1969	4,300 gal	Scrubber 011-1159
011-034.5	EP1	#5 Neutralizer	1969	4,300 gal	Scrubber 011-1159
011-034.6	EP1	#6 Neutralizer	1997	4,300 gal	Scrubber 011-1159
011-034.7	EP1	#7 Neutralizer	1997	4,300 gal	Scrubber 011-1159
011-034.8	EP1	#8 Neutralizer	1997	4,300 gal	Scrubber 011-1159

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-034.9	EP1	#9 Neutralizer	1997	4,300 gal	Scrubber 011-1159
011-609.1	EP3B	Pre-mix Tank (PVP63A/63B)	1983	1,000 gal	
011-609.2	EP3C	Pre-mix Tank (PVP65A/65B)	1983	1,000 gal	
011-609.3	EP3D	Pre-mix Tank (PVP61A/61B)	1983	1,000 gal	
011-741	EP3A	Pre-mix Tank (PVP59A/59B)	1988	2,000 gal	
011-610	EP3H	East Blend Tank (PVP60A/60B)	1982	5,850 gal	
011-740	EP3E	Far East Blend Tank (PVP58A/58B)	1988	5,850 gal	
011-115.1	EP3F	Middle Blend Tank (PVP62A/62B)	2001	5,850 gal	
011-115.2	EP3G	West Blend Tank (PVP64A/64B)	1970	5,850 gal	
011-662	EP42	SW Blend Storage (STV 27)	1982	25,000 gal	
011-611.1	EP43	SE Blend Storage (STV 28)	1982	25,000 gal	
011-570.1	EP44	E Blend Storage (STV 29)	1975	25,000 gal	
011-570.2	EP45	M Blend Storage (STV 30)	1975	25,000 gal	
011-570.3	EP46	W Blend Storage (STV 31)	1975	25,000 gal	
011-719.1	EP66A	Railcar loading (001-001)	1970's	N/A	
011-719.2	EP66B	Railcar loading (001-002)	1970's	N/A	
011-719.3	EP66C	Railcar loading (001-003)	1970's	N/A	
011-719.4	EP66D	Railcar loading (001-004)	1970's	N/A	
011-719.5	EP66F	Railcar loading (001-005)	1970's	N/A	
011-719.1A	EP67A	Trailer loading (002-001)	1970's	N/A	
011-719.1B	EP67B	Trailer loading (002-002)	1970's	N/A	
011-719.1C	EP67C	Trailer loading (002-003)	1970's	N/A	
011-719.1D	EP67D	Trailer loading (002-004)	1970's	N/A	
011-719.2A	EP68A	Trailer loading (003-001)	1970's	N/A	
011-719.2B	EP68B	Trailer loading (003-002)	1970's	N/A	
011-719.3A	EP69A	Trailer loading (004-001)	1970's	N/A	
011-579.3B	EP69B	Trailer loading (004-002)	1970's	N/A	
011-130	EP70	Drum/Tote Filling (005)	1970's	N/A	
011-621.1	EP-71	Trailer Loading (006)	1970's	N/A	
STV32	EP-72	FG Storage Tank (STV32)	2007	23,000 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Texin					
PV11	022-570	ZSK-83 Extruder	1988	10 MMlb/yr	
PV11	022-814	ZSK-83 Extruder	1995	10 MMlb/yr	
PV11	022-890	ZSK-120 Extruder	1996	20 MMlb/yr	
VC01/PC01	022-196.1	#1 Silo	1969	750 ft^3	
VC01/PC01	022-196.2	#2 Silo	1969	750 ft^3	
VC01/PC01	022-196.3	#3 Silo	1969	750 ft^3	
VC01/PC01	022-196.4	#4 Silo	1969	750 ft^3	
002-597/PC01	022-448	#5 Silo	1995	750 ft^3	
002-597/PC01	022-449	#6 Silo	1995	750 ft^3	
002-597/PC01	022-922	#7 Silo	1996	1500 ft^3	
002-597/PC01	022-923	#8 Silo	1996	1500 ft^3	
VC01/PC01	022-609	Pelletizer	1990	4000 lbs / hr	
VC01/PC01	022-710	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-821	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-822	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-897	Pelletizer	1996	4000 lbs / hr	
023-101	023-101	Polyol Stg Tank	1969	20000 gal	
023-104	023-104	Polyol Stg Tank	1969	20000 gal	
023-502	023-502	Polyol Stg Tank	1994	20000 gal	
023-508	023-508	Polyol Stg Tank	1994	20000 gal	
023-513	023-513	Polyol Stg Tank	2001	5000 gal	
023-113	023-113	Solvent Stg Tank	1969	5000 gal	
023-110	023-110	XE Stg Tank	1969	5000 gal	
022-118	022-118	Polyol Mix Tank	1969	1500 gal	
022-119	022-119	Polyol Mix Tank	1969	1500 gal	
022-122	022-122	Polyol Mix Tank	1969	1500 gal	
022-123	022-123	Polyol Mix Tank	1969	1500 gal	
022-116	022-116	XB Day Tank	1969	300 gal	
022-595	022-595	MDI Day Tank	1988	1050 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
022-441	022-441	DES-W Day Tank	1995	1050 gal	
022-117	022-117	XE Day Tank	1969	300 gal	
022-841	022-841	#2 Resin Run Tank	1969	60 gal	
022-875	022-875	Polyol Hold Tank	1995	2000 gal	
022-878	022-878	Polyol Hold Tank	1996	2000 gal	
022-732	022-732	#1 Resin Heater	1988	141 M BTU/hr	
022-813	022-813	#2 Resin Heater	1995	141 M BTU/hr	
022-889	022-889	#3 Resin Heater	1996	198 M BTU/hr	
022-841b	022-841b	#1 Resin Run Tank	1969	60 gal	
022-1077	022-1077	Hold Tank	2002	2000 gal	
TX4-1	022-1080	Additive Batch Tank	2003	250 gal	
TX4-1	022-1082/1083	Mixer/Product Cure Oven	2003		
TX4-2	022-1076	Hold Tank	2003	2,000 gal	
TX4-3	022-0118	Mix Tank	2003	1,500 gal	
TX4-4	022-0831	Cyclone	2003	6.41 ft^3	022-970
022-844a	022-844a	MDI Run Tank	1969	20 gal	
022-844b	022-844b	XE Run Tank	1969	20 gal	
MPP					
PCV001.2	5700-011	Intermediate Hold Tank	1981	5,600 gal	Car-1
PCV001.2	5700-001.1	#1 Crystallizer	1981	5,313 gal	Car-1
PCV001.2	5700-001.2	#2 Crystallizer	1981	5,313 gal	Car-1
PCV001.2	5700-008.1	#1 TD Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-008.2	#2 TD Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-009.1	#1 TDS Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-009.2	#2 TDS Hold Tank	1981	3,600 gal	Car-1
SPU					
026-092	92	Methyl-P Storage Pot	1990	50 Gal	Carbon Drum car-092
026-662	662	Benzoyl Chloride Pot	1989	30 Gal	Carbon Drum car-662
026-762	762	Masterbatch Mix Tank	1992	100 Gal	Carbon Drum car-762

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
026-663	663	Isocyanate Weigh Tank	1989	2,000 Gal	Carbon Drum car-663
026-644	644	Polyester Weigh Tank	1989	2,000 Gal	None
026-642	642	Polyether Weigh Tank	1989	2,000 Gal	None
026-524	524	#1 Weigh Tank	1981	2,000 Gal	None
026-552	552	#2 Weigh Tank	1981	2,000 Gal	None
026-653	653	Vacuum Pump	1989	NA	Carbon Drum car-653
026-233	233	Vacuum Pump	1974	NA	Carbon Drum car-233
026-654	654	Vacuum Pump	1989	NA	Carbon Drum car-654
026-794	794	Pig Launcher	1994	NA	Carbon Drum car-794
026-522	PV12	"R" Reactor Vent	1981	7,500 Gal	Carbon Drum car-522
026-230	PV10	"M" Reactor Vent	1974	5,000 Gal	Carbon Drum car-230r
026-645	PV13	"X" Reactor Vent	1989	9,000 Gal	Carbon Drum car-645
026-756	PV09	"M" Drumming Vent	1990	NA	Carbon Drum car-756
026-752	PV14	"X" Drumming Vent	1990	NA	Carbon Drum car-752
032-001	PV86	TDI Run Tank	1970	1,850 Gal	Carbon Drum car-4
032-006	006	Polyol Run Tank	1970	1,850 Gal	None
032-002	002	#1 Post Reactor	1970	1,850 Gal	None
032-003	045.1	#2 Post Reactor	1970	1,850 Gal	None
032-044	045.1	Thin Film Evaporator	1979	300 Gal	None
032-005	005	#2 Intermediate Storage	1970	1,850 Gal	None
032-030	045.1	Condenser	1971	150 Gal	None
032-031	045.1	Condenser	1971	150 Gal	None
032-539	045.1	PHD Vacuum Pump	2001	N/A	None
026-008	8	Tank Truck Loading	1984	N/A	Carbon Drum car-008

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
026-592.1	592.1	Vacuum Pump	1984	N/A	None
026-592.2	592.2	Vacuum Pump	1984	N/A	None
026-548.1	548.1	Vacuum Pump	1997	N/A	Scrubber 060-064
026-548.2	548.2	Vacuum Pump	1997	N/A	Scrubber 060
026-548.3	548.3	Vacuum Pump	1995	N/A	Scrubber 060
026-547.2	*	"N" Vacuum Pump to West Knock-out Pot	1983	290 Gal	(Thru 548.2)
026-541	*	"N" Reactor Reflux Column	1983	690 Gal	(Thru 548.1)
026-543	*	"N" Reactor Partial Condenser	1983	350 Gal	(Thru 548.1)
026-545	*	"N" Reactor Total Condenser	1983	175 Gal	(Thru 548.1)
026-547.1	*	"N" Vacuum Pump to East Knock-out Pot	1983	290 Gal	(Thru 548.1)
026-807	*	"O" Reactor Reflux Column	1997	690 Gal	(Thru 548.3)
026-809	*	"O" Reactor Partial Condenser	1997	350 Gal	(Thru 548.3)
026-811	*	"O" Reactor Total Condenser	1997	175 Gal	(Thru 548.3)
026-813	*	"O" Reactor Knock-out Condenser	1997	60 Gal	(Thru 548.3)
026-814	*	"O" Reactor Knock-out Separator	1997	200 Gal	(Thru 548.3)
026-804	*	"O" Reactor	1997	7,500 Gal	(Thru 548.3)
026-589	PV08	Glycol Weigh Tank	1985	2,000 Gal	None
026-555	PV05	"L" Drumming (IDLE)	1985	NA	Carbon Drum car-555
026-533	PV07	"N" Reactor Vent	1983	7,500 Gal	None
026-588	588	Acid Weigh Tank	1985	2,000 Gal	None
MHD					
301	301	Storage Tank	Approx. 1967	20,000 Gallons	None
302	302	Storage Tank	Approx. 1967	20,000 Gallons	None
303	303	Storage Tank	1963	20,000 Gallons	None
304	304	Storage Tank	1963	20,000 Gallons	None
305	305	Storage Tank	1961	80,000 Gallons	None
306	306	Storage Tank	Approx. 1967	80,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
309	309	Storage Tank	Approx. 1967	10,000 Gallons	None
310	310	Storage Tank	Approx. 1967	18,000 Gallons	None
312	312	Storage Tank	Approx. 1967	18,000 Gallons	None
313	313	Storage Tank	Approx. 1967	20,000 Gallons	None
315	315	Storage Tank	1963	20,000 Gallons	None
317	317	Storage Tank	Approx. 1967	12,000 Gallons	None
321	321	Storage Tank	Approx. 1967	12,000 Gallons	None
322	322	Storage Tank	Approx. 1967	12,000 Gallons	None
323	323	Storage Tank	Approx. 1967	12,000 Gallons	None
324	324	Storage Tank	Approx.1967	20,000 Gallons	None
325	325	Storage Tank	Approx. 1967	12,000 Gallons	None
326	326	Storage Tank	Approx. 1967	35,000 Gallons	None
327	327	Storage Tank	Approx. 1967	35,000 Gallons	None
539	539	Storage Tank	Approx. 1967	500,000 Gallons	None
558	CA24	Storage Tank	1991	40,000 Gallons	TCA08 Carbon
559	CA25	Storage Tank	1991	40,000 Gallons	TCA09 Carbon
1202	1202	Storage Tank	Prior to 1980	25,000 Gallons	None
1203	1203	Storage Tank	1981	300,000 Gallons	None
1204	1204	Storage Tank	Prior to 1980	25,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1205	1205	Storage Tank	Prior to 1980	12,500 Gallons	None
1206	1206	Storage Tank	Prior to 1980	28,000 Gallons	None
1207	1207	Storage Tank	Prior to 1980	80,000 Gallons	None
1208	1208	Storage Tank	1982	80,000 Gallons	None
1209	1209	Storage Tank	Prior to 1980	80,000 Gallons	None
1210	1210	Storage Tank	Prior to 1980	20,000 Gallons	None
1211	1211	Storage Tank	Prior to 1980	20,000 Gallons	None
1212	1212	Storage Tank	Prior to 1980	12,000 Gallons	None
1213	1213	Storage Tank	Prior to 1980	12,000 Gallons	None
1214	1214	Storage Tank	Prior to 1980	12,000 Gallons	None
1215	1215	Storage Tank	Prior to 1980	12,000 Gallons	None
1216	1216	Storage Tank	Prior to 1980	12,000 Gallons	None
1301	1301	Storage Tank	1966	300,000 Gallons	None
1302	1302	Storage Tank	1968	300,000 Gallons	None
1303	1303	Storage Tank	1970	300,000 Gallons	None
1304	1304	Storage Tank	1970	300,000 Gallons	None
1305	1305	Storage Tank	1970	300,000 Gallons	None
1306	1306	Storage Tank	1970	80,000 Gallons	Carbon
1307	1307	Storage Tank	1970	80,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1308	1308	Storage Tank	1970	80,000 Gallons	None
1309	1309	Storage Tank	1970	80,000 Gallons	None
1310	1310	Storage Tank	1970	80,000 Gallons	None
1311	1311	Storage Tank	Approx. 1969	80,000 Gallons	None
1312	1312	Storage Tank	Approx. 1969	12,000 Gallons	None
1313	1313	Storage Tank	Approx. 1969	25,000 Gallons	None
1314	1314	Storage Tank	Approx. 1969	25,000 Gallons	None
1315	1315	Storage Tank	Approx. 1969	25,000 Gallons	None
1316	1316	Storage Tank	Approx. 1969	25,000 Gallons	None
1317	1317	Storage Tank	Approx. 1969	25,000 Gallons	None
1318	1318	Storage Tank	Approx. 1969	25,000 Gallons	None
1319	1319	Storage Tank	Approx. 1969	25,000 Gallons	None
1320	1320	Storage Tank	Approx. 1969	25,000 Gallons	None
1321	1321	Storage Tank	1970	25,000 Gallons	None
1322	1322	Storage Tank	1970	25,000 Gallons	None
1323	1323	Storage Tank	Approx. 1969	80,000 Gallons	None
1324	1324	Storage Tank	Approx. 1969	25,000 Gallons	None
1325	1325	Storage Tank	1978	80,000 Gallons	None
1326	1326	Storage Tank	1961	80,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1327	1327	Storage Tank	Approx. 1969	80,000 Gallons	None
030-01	030-01	Storage Tank	Approx. 1965	26,000 Gallons	None
030-02	030-02	Storage Tank	Approx. 1965	26,000 Gallons	None
4500-026	4500-026	Storage Tank	Approx. 1981	20,000 Gallons	None
03P	03P	Loading Rack	1963	NA	Carbon
03Q	03Q	Loading Rack	1961	NA	Carbon
03S	03S	Loading Rack	1970	NA	Carbon
03W	03W	Loading Rack	Prior to 1970	NA	Carbon
03Z	03Z	Loading Rack	1961	NA	Carbon
04A	04A	Loading Rack	Approx. 1967	NA	Carbon
05G	05G	Loading Rack	Approx. 1970	NA	Carbon
05TD	05TD	Loading Rack	1970	NA	Carbon
12B	12B	Loading Rack	1982	NA	None
12C	12C	Loading Rack	Prior to 1970	NA	None
13HH	13HH	Loading Rack	Prior to 1970	NA	None
13II	13II	Loading Rack	1966	NA	None
13KK	13KK	Loading Rack	1970	NA	None
13LL	13LL	Loading Rack	1970	NA	None
05L	CA26	TD/TDS Loading	1991	NA	Carbon Adsorption
bnvcl-1	bnvcl-1	Benzoyl Chloride Injection System	1991	NA	Carbon Adsorption
Control Devices					
ECD					
033-070	011	Electrostatic Precipitator	1986	9,000 lbs/hr	N/A
033-083	011	FBI Two Stage Jet Scrubber	1986	9,000 lbs/hr	N/A
033-021	PB15	TDI residue baghouse	1986	1,525 lbs/hr	N/A
033-207	011	PAC silo baghouse	2000	1,000 scfm 226 ft^2	N/A
033-221	011	Sulfur silo baghouse	2002	3.3scfm 46 ft^2	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
033-162c	011	Carbon Drum for aqueous burning tank	1991	55 gal	Scrubber
033-197c	011	Carbon Drum for wastewater tank (197)	1998	55 gal	N/A
033-198c	011	Carbon Drum for wastewater tank (198)	1998	55 gal	N/A
9100-525	011	Lime Silo Scrubber	1980	27 ft^3	N/A
HCL and SL – Control Devices					
5300-052	015	Scrubber 052	2000		
5300-624	015	Scrubber 624	1966		
5300-701	015	Scrubber 701	1980		
9950-515	15NN/15OO	HCL Loading Scrubber	1996	2250 cfm; 19gpm	N/A
Polyols – Control Devices					
011-1159	EP-1	Acid Scrubber	2002	N/A	
Texin – Control Devices					
022-970	TX4-4	Baghouse	1996		
022-1151	VC01/PC01	Baghouse	2009		
MPP – Control Devices					
Car-1	PCV0001.2	Carbon Drum			
SPU – Control Devices					
Car-092	092	Carbon Drum	Changed frequently		
Car-662	662	Carbon Drum	Changed frequently		
Car-762	762	Carbon Drum	Changed frequently		
Car-663	663	Carbon Drum	Changed frequently		
Car-653	653	Carbon Drum	Changed frequently		
Car-233	233	Carbon Drum	Changed frequently		
Car-654	654	Carbon Drum	Changed frequently		
Car-794	794	Carbon Drum	Changed frequently		
Car-522	PV12	Carbon Drum	Changed frequently		

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Car-230	PV10	Carbon Drum	Changed frequently		
Car-645	PV13	Carbon Drum	Changed frequently		
Car-756	PV09	Carbon Drum	Changed frequently		
Car-752	PV14	Carbon Drum	Changed frequently		
Car-4	PV86	Carbon Drum	Changed frequently		
Car-008	8	Carbon Drum	Changed frequently		
Car-444	PV05	Carbon Drum	Changed frequently		

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0026	6/22/1983
R13-0138B	6/22/1983
R13-2677D	7/24/2008
R13-0842E	1/19/2010
R13-0863	7/18/1986
R25 HW-10	10/12/2007
R13-0537	3/7/1980
R13-2507	10/29/2002
R13-0459	12/21/1978
R13-0555	6/24/1980
R13-2443C	1/28/2008
R13-1409B	11/21/2006

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. **[45CSR§30-5.1.b.]**

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. **[45CSR§30-4.1.a.3.]**

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. **[45CSR§30-6.3.b.]**

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. **[45CSR§30-6.3.c.]**

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. **[45CSR§30-5.1.f.3.]**

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and

are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-0026, R13-0138B, R13-459, R13-537, R13- 555, R13-0842E, R13-0863, R13-2443, R13-2443A, R13-2443B, R13-2443C, R13-2507, R13-2677A, R13-2677B, R13-2677C, R13-2677D, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[Permit No. R13-0842 (Condition C.3.), Permit No. R13-0863 (Condition G.2.), Permit No. R13-2443 (Condition C.3.), Permit No. R13-2507 (Condition C.3.)]

3.1.10. Facility-wide annual emissions to the atmosphere of Hazardous Air Pollutants (HAP) shall not exceed 9.4 tpy of any single HAP or 24.4 tpy on an aggregated basis of total HAP, and shall be limited to the species listed in Table 3.5.10 found in Condition 3.5.10, except as given in Condition 3.1.11 and 3.1.12. Compliance with the annual emission limits shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of the emissions at any given time for the previous twelve (12) consecutive months.
[45CSR§30-12.7.]

3.1.11. Unless listed in Table 3.5.10 given in Condition 3.5.10, the use of any Hazardous Air Pollutant (HAP) with emission rates in excess of 50 lbs/yr shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the HAP(s) within thirty (30) days of its use.

b. The use of the HAP shall be incorporated into the record keeping requirements contained herein.
[45CSR§30-12.7.]

3.1.12. Unless listed in Table 3.5.10 given in Condition 3.5.10, the use of any toxic air pollutant (TAP) as defined by West Virginia Legislative Rule 45CSR27, Section 2.10, with emission rates in excess of 50 lbs/yr, shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the TAP(s) within thirty (30) days of its use.

b. The use of the TAP shall be incorporated into the record keeping requirements contained herein.

c. The emission rate of the TAP(s) shall not equal or exceed, on a per-TAP basis, the annual limits contained in 45CSR27, Table A. Compliance with the annual emission limits shall be determined using rolling yearly totals.
[45CSR§30-12.7. State-Enforceable Only]

3.2. Monitoring Requirements

3.2.1. To demonstrate compliance with Condition 3.1.10, the facility shall calculate on a monthly and annual basis facility-wide HAP emissions to the atmosphere by calculating each individual HAP and total HAP emissions for each calendar month and a 12-month rolling total.
[45CSR§30-5.1.c.]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. Unless otherwise specified in the permit, the permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. To demonstrate compliance with the facility-wide HAP limits of Condition 3.1.10 and monitoring requirements of Condition 3.2.1, the permittee shall maintain monthly and yearly records of facility-wide HAP emissions to the atmosphere. The facility shall prepare monthly facility-wide calculations of the amount of each individual HAP emitted and the amount of aggregated total HAPs emitted. Yearly HAP calculations shall be based on a 12-month rolling total. The permittee shall record and maintain these monthly calculations and all supporting data utilized to perform these calculations for the most recent five (5) year period, and such records shall be made available to the Director or his/her duly authorized representative upon request at any reasonable time.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. **[45CSR§30-5.3.e.]**

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. **[45CSR§30-5.1.c.3.A.]**

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. **[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. If the permittee emits any HAP other than those listed in Table 3.5.10. below, at an estimated potential annual emission rate of 50 pounds per year or greater, the permittee shall provide written notification to the Director of the Division of Air Quality within thirty (30) days of knowledge of such emission. This written notification shall include the facility-wide potential to emit (in lbs/hr and tpy) for each new HAP species as well as the location of emissions.

Table 3.5.10. Current HAP Species Emitted (* indicates < 50 lb/yr)

CAS No.	Chemical Name
71-43-2	Benzene
108-90-7	Chlorobenzene
106-46-7	1,4-Dichlorobenzene *

CAS No.	Chemical Name
111-42-2	Diethanolamine *
107-21-1	Ethylene Glycol
75-21-8	Ethylene Oxide
50-00-0	Formaldehyde
822-06-0	Hexamethylene Diisocyanate (HMDI)
110-54-3	Hexane
302-01-2	Hydrazine
7647-01-0	Hydrochloric Acid
101-68-8	4,4-Methylene Diphenyl Diisocyanate (MDI)
85-44-9	Phthalic Anhydride
75-56-9	Propylene Oxide
121-44-8	Triethylamine
108-88-3	Toluene
95-80-7	2,4-Toluenediamine
584-84-9	2,4-Toluene Diisocyanate (TDI)
1330-20-7	Xylene (isomers and mixtures, including m-Xylene, o-Xylene and p-Xylene)
-	Misc. Organic HAPS*
-	Misc. Metallic HAPS *

[45CSR§30-5.1.c.]

3.6. Compliance Plan

N/A

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

40 C.F.R. §§60.40-60.48 NSPS Subpart D (August 17, 1971)	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After 8/17/71. Boiler #9 and Boiler #10 started up in 1971 but prior to August 17, 1971; Current capacities are all < 250 MM BTU/hr essentially as built; maintenance & capital work on boilers have been routine maintenance, repair & replacement, and not "modifications"
40 C.F.R. §§60.40b-60.49b NSPS Subpart Db (June 19, 1984)	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Boiler #11 (98 MM Btu/hr) started up in December 2007; The capacity is below 100 MM Btu/hr.

40 C.F.R. §§60.110-113 NSPS Subpart K (June 11, 1973)	Standards of Performance for Storage Vessels for Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978. Petroleum liquid storage vessels have capacities less than 40,000 gallons.
40 C.F.R. §§60.110a-115a NSPS Subpart Ka (May 19, 1978)	Standards of Performance for Storage Vessels for Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984. Petroleum liquid storage vessels have capacities less than 40,000 gallons.
40 C.F.R. §§60.110b-60.117b NSPS Subpart Kb (July 23, 1984)	All tanks were found not to be subject to NSPS Kb since all: 1) Were built before July 23, 1984, and no physical modifications or reconstructions were performed since July 23, 1984 and/or 2) Are of capacity less than 19,813 gallons and/or 3) Are of a capacity greater than 39,890 gallons, and have a maximum true vapor pressure of 0.51 psia or less and/or 4) Are of a capacity between 19,818 gallons and 39,890 gallons and have a maximum true vapor pressure of 2.2 psia or less.
40 C.F.R. §§60.150-60.156 NSPS Subpart O	Standards of Performance for Sewage Treatment Plants. The Permittee does not operate a municipal treatment plant.
40 C.F.R. §§60.610-60.618 NSPS Subpart III (October 21, 1983)	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Process. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§60.660-60.668 NSPS Subpart NNN (12/30/83)	Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§60.700-60.708 NSPS Subpart RRR (6/29/1990)	Standards of Performance for Volatile Organic Compound Emissions form Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§ 60-480-60.489 NSPS Subpart VV (1/5/1981)	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. This facility does not produce final or intermediate products as defined in §60.489.
40 C.F.R. § 63 (Except for Subpart EEE, Subpart PPP, and Subpart VVVVVV)	National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT). The facility is not subject to the major source requirements of the standard. The facility PTE for an individual HAP is not greater than 9.4 tons and aggregate total of all HAPs is not greater than 24.4 tons.
40 C.F.R. 60, Subpart E – "Standards of Performance for Incinerators."	The Bayer-New Martinsville plant incinerator is covered under the Combustion MACT, which has more stringent requirements

40 C.F.R. 60, Subpart DDD – "Standards of Performance for Volatile Organic Compound (VOC)	Emissions from the Polymer Manufacturing Industry." The Bayer-New Martinsville plant does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
40 C.F.R. 61, Subpart V – "National Emission Standards for Equipment Leaks (Fugitive Emissions Sources)."	Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Bayer-New Martinsville plant.
45CSR17 – "To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter."	Per 45CSR§17-6.1, the Bayer-New Martinsville plant is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.

4.0 Boiler House #2 (9300-648, 9300-501, 9300-720)

4.1. Limitations and Standards

4.1.1. Boiler #11 shall be limited to a maximum designed heat input of 98 x 10^6 BTUs per hour.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.1.) (9300-720)]

4.1.2. Fuel supplied to Boiler #11 shall be limited to natural gas with a maximum heat content of 1,143 BTUs per cubic foot.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.2.) (9300-720)]

4.1.3. The natural gas consumption of Boiler #11 shall not exceed a maximum of 85,773 cubic feet per hour and 751.6 x 10^6 cubic feet per year.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.3.) (9300-720)]

4.1.4. Emissions released from Boiler #11 shall be limited to the pollutants and associated emission rates as shown in Table 4.1.4.

Table 4.1.4.

Source	Pollutant	Maximum Emission Rate	
		Hourly (lb/hr)	Annual (TPY)
Boiler #11	NO_X	3.2	13.9
	CO	7.2	31.6
	SO_2	0.1	0.2
	PM_{10}	0.7	3.0
	VOC	0.5	2.1

[45CSR13, Permit No. R13-2677 - (Condition 4.1.4.) Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1.b. Compliance with this streamlined SO2 limit assures compliance with 45CSR§10-3.1.e. (9300-720)]

4.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1, 45CSR13, Permit No. R13-2677 - (Condition 4.1.5.) (9300-648, 9300-501, 9300-720)]

4.1.6. The visible emission standards set forth in Condition 4.1.5 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1. (9300-648, 9300-501, 9300-720)]

4.1.7. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based

on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source. **[45CSR§2-9.2. (9300-648, 9300-501, 9300-720)]**

4.1.8. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date and time of duration (with starting and ending times) of the period of excess emissions;

3. An estimate of the mass of excess emissions discharged during the malfunction period;

4. The maximum opacity measured or observed during the malfunction;

5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (9300-648, 9300-501, 9300-720)]

4.1.9. The #9 boiler shall only use natural gas as fuel. Emissions from the #9 boiler shall not exceed 15.7 lbs/hr for particulate matter and 86 lbs/hr of SO2.
[45CSR§30-12.7, 45CSR13, Permit No. R13-26 Amended, 45CSR§2-4.1.b, 45CSR§10-3.1.e, and Consent Order CO-SIP-2000-02 Condition IV.3.C. (9300-648)]

4.1.10. The #10 boiler shall only use natural gas as fuel. Emissions from the #10 boiler shall not exceed 11.4 lbs/hr for particulate matter and 62.5 lbs/hr of SO2.
[45CSR§30-12.7, 45CSR13, Permit No. R13-138, 45CSR§2-4.1.b, 45CSR§10-3.1.e, and Consent Order CO-SIP-2000-02 Condition IV.3.C. (9300-501)]

4.1.11. To ensure compliance with the HAP PTE, the total natural gas consumption for the combination of Boilers 9, 10, and 11 shall not exceed 3,949 * 10^6 cubic feet per year on a rolling 12-month basis. **[45CSR§30-12.7.]**

4.2. Monitoring Requirements

N/A

4.3. Testing Requirements

N/A

4.4. Recordkeeping Requirements

4.4.1. Compliance with Conditions 4.1.2 and 4.1.3 of this permit shall be demonstrated by maintaining records of Boiler #11's hours of operation and associated fuel consumption. Such records shall include, but not be limited to, the associated monthly averaged hourly and annual fuel consumption rates during boiler start-up and routine operation.
[45CSR13, Permit No. R13-2677 - (Condition 4.4.4.) (9300-720)]

4.4.2. The Permittee shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of the following sources: Boilers Number 9 and Number 10 as well as any malfunction of air pollution control equipment or any periods during which a control device was inoperative.
[Consent Order CO-SIP-2000-02 (Condition VI.2.) (9300-648, 9300-501)]

4.4.3. Regarding Boiler #9 and #10, the permittee shall keep records of the following:
a. Natural gas usage rates once per eight (8) hour shift.
b. Steam production rate on a two hour basis.
[45CSR13, Permit No. R13-26 Amended and R13-138. (9300-648, 9300-501)]

4.4.4. The Permittee shall record and maintain records of the amount of natural gas combusted during each calendar month.
[45CSR16, 40CFR§60.48c(g)(2), 45CSR13, Permit No. R13-2677 - (Condition 4.1.6.) (9300-720)]

4.4.5. The Permittee shall keep the records that are required by Condition 4.4.4 for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40CFR§63.10(b)(1). The Permittee can keep the records off site for the remaining 3 years.
[45CSR16, 40CFR§60.48c(i), 45CSR13, Permit No. R13-2677 - (Condition 4.1.6.) (9300-720)]

4.5. Reporting Requirements

4.5.1. The Permittee shall report to the Secretary, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Permittee shall file a written report concerning the malfunction with the Secretary within ten (10) days, providing the following information:

A. A detailed explanation of the factors involved or causes of the malfunction;
B. The date and time of duration (with starting and ending times) of the period of excess emissions;
C. An estimate of the total amount of excess emissions discharged during the malfunction period;

D. The maximum emission rate determined during the malfunction in units of the applicable missions standard;
E. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction and;
F. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[Consent Order CO-SIP-2000-02 (Condition VI.3.) (9300-648, 9300-501)]

4.6. Compliance Plan

N/A

5.0 Environmental Control Department

5.1. Limitations and Standards

5.1.1. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (033-040)]

5.1.2. The visible emission standards set forth in 45CSR§2-3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1. (033-040)]

5.1.3. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source.
[45CSR§2-9.2. (033-040)]

5.1.4. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date and time of duration (with starting and ending times) of the period of excess emissions;

3. An estimate of the mass of excess emissions discharged during the malfunction period;

4. The maximum opacity measured or observed during the malfunction;

5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (033-40)]

5.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. Compliance with this streamlined opacity limit will also show compliance with 45CSR§6-4.3. (033-40)]

5.1.6. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5. (033-40, 5300-580)]

5.1.7. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emissions of objectionable odors.
[45CSR§6-4.6. (033-40, 5300-580)]

5.1.8. The following maximum emission rates from the fluidized bed incinerator shall not be exceeded for the specified air pollutants, from the incinerator:

	lbs/hr	TPY
Sulfur Dioxide	7.1	28.4
Nitrogen Oxides	8.5	26.4

[Consent Order CO-SIP-2000-02 (Condition IV.3.E.) (SO2 limit only), Permit No. R13-0842 (Condition A.1.) Compliance with this streamlined SO2 limit assures compliance with 45CSR§10-4.3. (033-040)]

5.1.9. The incinerator shall not be operated in excess of 8,760 hours per year.
[Permit No. R13-0842 (Condition A.2.) (033-040)]

5.1.10. The maximum heat input to the incinerator from utilization of fuel oil as auxiliary fuel shall not exceed 12 $\times 10^6$ BTU/hr.
[Permit No. R13-0842 (Condition A.3.) (033-040)]

5.1.11. Toluene Diisocyanate Residue emissions from the TDI Residue Baghouse shall not exceed the maximum emission limitations of 1.0 lb/hr submitted in Permit Application No. R13-0863.
[Permit No. R13-0863 (Conditions A.1 and B.1) Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1. (033-021)]

5.1.12. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7. (033-121)]

5.1.13. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1. (033-121)]

5.1.14. The permittee shall comply with all applicable requirements of 40CFR63, Subpart EEE, which include but are not limited to the following standards of 40CFR§63.1219:

(a) Permittee must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) For incinerators equipped with either a waste heat boiler or dry air pollution control system.

(B) Emissions in excess of 0.40 ng TEQ/dscm (toxicity equivalent) corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 °F or lower based on the average of the test run average temperatures.

[40CFR§63.1219 (a)(1)(i)(B), 45CSR34. (033-040)]

(2) Mercury in excess of 130 μg/dscm corrected to 7 percent oxygen
[40CFR§63.1219 (a)(2), 45CSR34. (033-040)]

(3) Lead and cadmium in excess of 230 μg/dscm, combined emissions, corrected to 7 percent oxygen
[40CFR§63.1219 (a)(3), 45CSR34. (033-040)]

(4) Arsenic, beryllium, and chromium in excess of 92 μg/dscm, combined emissions, corrected to 7 percent oxygen
[40CFR§63.1219 (a)(4), 45CSR34. (033-040)]

(5) For carbon monoxide and hydorcarbons:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under 40CFR§63.1219(a)(5)(ii), you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 40CFR§63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane

[40CFR§63.1219 (a)(5)(i), 40CSR34. (033-040)]

(6) Hydrochloric acid and chlorine gas in excess of 32 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen
[40CFR§63.1219 (a)(6), 45CSR34. (033-040)]

(7) Particulate matter in excess of 0.013 gr/dscf corrected to 7 percent oxygen
[40CFR§63.1219 (a)(7), 45CSR34. (033-040) Compliance with this PM limit assures compliance with 45CSR§2-4.1.]

(b) Destruction and removal efficiency (DRE) standard – (1) 99.99% DRE.
Except as provided in paragraph (b)(2) this section, you must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC). You must calculate DRE for each POHC from the following equation:

$$DRE = [1 - (W_{out} / W_{in})] \times 100\%$$

Where: W_{in} = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and
W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere

(b)(2) 99.9999% DRE. If you burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (see §261.31 of this chapter), you must achieve a DRE of 99.9999% for each POHC that you designate under paragraph (b)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodebenzo – p – dioxins and debenzofurans. You must notify the Administrator of your intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(b)(3) Principal organic hazardous constituent (POHC). (i) You must treat each POHC in a waste feed that you specify under paragraph (b)(3)(ii) of this section to the extent required by paragraphs (b)(1) and (b)(2) of this section.

(ii) You must specify one or more POHCs that are representative of the most difficult to destroy organic compounds in your hazardous waste feedstream. You must base this specification on the degree of difficulty of incineration of the organic constituents in the hazardous waste and of their concentration or mass in the hazardous waste feed, considering the results of hazardous waste analyses of other data and information.
[40CFR§63.1219 (c)(1-3), 45CSR34. (033-040)]

(c) Per 40CFR§631219(d), the emission limits provided by 40CFR§§63.1219(a) and (b) (Condition 5.1.14(a)) are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance
[40CFR§63.1219 (d), 45CSR34. (033-040)]

5.1.15. The permittee shall operate the fluidized bed incinerator (FBI) with a functioning system that immediately and automatically cuts off the hazardous waste feed when operating parameter limits or emission standards are exceeded. An immediate and automatic cutoff shall also be triggered when the span value of any process monitor is exceeded. Any malfunctions of the monitoring equipment or automatic waste feed

cutoff system shall also initiate an immediate and automatic cutoff of hazardous waste feed. These specific cutoffs are listed as follows:

Parameter	Trigger	Reason
Wastewater treatment sludge feed rate	> 15,000 lb/hr	span value
Solid organic residue feed rate	> 3,000 lb/hr	span value
Liquid organic waste feed rate (north)	> 2,500 lb/hr	span value
Liquid organic waste feed rate (south)	> 2,500 lb/hr	span value
Total waste feed rate	> 8,493 lb/hr	OPL
Inhibitor feed rate	> 40 lb/hr	span value
Inhibitor feed rate	< 15 lb/hr	OPL
Combustion temperature	> 1,500 °C	span value
Combustion temperature	< 909 °C	OPL
Combustion chamber pressure	> 0 in. w.c.	OPL
Combustion air flow rate	> 10.0 Mscfm	span value
Combustion air flow rate	> 6.5 Mscfm	OPL
Total mercury feed rate	> 0.02 lb/hr	OPL
Total semi-volatile metals (SVM) feed rate	> 1.01 lb/hr	OPL
Total low-volatile metals (LVM) feed rate	> 1.14 lb/hr	OPL
Total chlorine/chloride feed rate	> 149 lb/hr	OPL
Total ash feed rate	> 496 lb/hr	OPL
ESP inlet temperature	> 300 °C	span value
ESP inlet temperature	> 203 °C	OPL
ESP total power	> 17,500 Va	span value
ESP total power	< 3,278 Va	OPL
Activated carbon feed rate	> 50 lb/hr	span value
Activated carbon feed rate	< 20 lb/hr	OPL
Activated carbon carrier fluid flow rate	> 200 cfm	span value
Activated carbon carrier fluid flow rate	< 70 cfm	OPL
Primary wet scrubber pH	> 14	span value
Primary wet scrubber pH	< 6	OPL
Secondary wet scrubber pH	> 14	span value
Secondary wet scrubber pH	< 6.1	OPL
Primary wet scrubber blowdown rate	> 100 gpm	span value
Primary wet scrubber blowdown rate	< 26 gpm	OPL
Secondary wet scrubber blowdown rate	> 100 gpm	span value
Secondary wet scrubber blowdown rate	< 26 gpm	OPL
Primary wet scrubber water flow rate	(4) > 350 gpm (1) > 250 gpm	span value
Secondary wet scrubber water flow rate	> 2,000	span value
Primary wet scrubber liquid to gas ratio	< 159 gal/Mscf	OPL
Secondary wet scrubber liquid to gas ratio	< 192 gal/Mscf	OPL
Primary wet scrubber liquid feed pressure	> 100 psig	span value
Primary wet scrubber liquid feed pressure	< 51 psig	OPL
Secondary wet scrubber liquid feed pressure	> 100 psig	span value
Secondary wet scrubber liquid feed pressure	< 54 psig	OPL

Parameter	Trigger	Reason
Stack CO concentration	100 ppmv	emission standard

[40CFR§63.1206(c)(3), 45CSR34. (033-040, 033-070, 033-083)]

5.1.16. The permittee must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify:

a. The parameters for which each feedstream will be analyzed to ensure compliance with the operating parameter limits (OPLs);
b. The method that will be used to obtain the analysis;
c. The method(s) used to document compliance with the applicable feedrate OPLs;
d. The analytical methods that will be used;
e. The sampling methods that will be used; and
f. The frequency of sampling and analysis to ensure accuracy.

[40CFR§63.1209(c)(2), 45CSR34. (033-040)]

5.1.17. For the purpose of ensuring compliance with the emission standards of Condition 5.1.14, the following operating parameter limits (OPLs) shall be maintained:

Parameter	OPL	Averaging Period	Emission Standard
Minimum combustion temperature	909°C	HRA	DRE and D/F
Maximum combustion chamber pressure	Below atmospheric	Instantaneous	Fugitive emissions
Maximum total hazardous waste feed rate	8,493 lb/hr	HRA	DRE and D/F
Maximum flue gas flow rate	6.5 Mscfm	HRA	DRE, D/F, HCl/Cl_2, SVM, LVM, and PM
Maximum ash feed rate	496 lb/hr	12-hr RA	PM
Maximum total chlorine feed rate	149 lb/hr	12-hr RA	HCl/Cl2, SVM, and LVM
Maximum mercury feed rate	0.02 lb/hr	12-hr RA	Mercury
Maximum SVM feed rate	1.01 lb/hr	12-hr RA	SVM
Maximum LVM feed rate	1.14 lb/hr	12-hr RA	LVM
Minimum inhibitor feed rate	15 lb/hr	HRA	D/F
Maximum temperature at the inlet to the ESP	203°C	HRA	D/F, SVM, and LVM
Minimum ESP total power	3,278 Va	HRA	SVM, LVM, and PM

Parameter	OPL	Averaging Period	Emission Standard
Minimum activated carbon feed rate	20 lb/hr	HRA	D/F and mercury
Minimum activated carbon carrier fluid flow rate	70 scfm	HRA	D/F and mercury
Minimum primary wet scrubber liquid feed pressure	51 psig	HRA	Mercury and HCL/Cl_2
Minimum secondary wet scrubber liquid feed pressure	54 psig	HRA	Mercury and HCL/Cl_2
Minimum primary wet scrubber liquid to gas ratio	159 gal/Mcf	HRA	Mercury and HCL/Cl_2
Minimum secondary wet scrubber liquid to gas ratio	192 gal/Mcf	HRA	Mercury and HCL/Cl_2
Minimum primary wet scrubber pH	6.0	HRA	HCL/Cl_2
Minimum secondary wet scrubber pH	6.1	HRA	HCL/Cl_2
Minimum primary scrubber blowdown	26 gpm	HRA	D/F, SVM, LVM, and PM
Minimum secondary scrubber blowdown	26 gpm	HRA	D/F, SVM, LVM, and PM

40CFR§63.1206(c)(1), 45CSR34. (033-040, 033-070, 033-083)]

5.1.18. For the purpose of minimizing fugitive emissions, the combustion chamber pressure of the fluidized bed incinerator shall be below atmospheric pressure at all times. Combustion chamber pressure shall be monitored instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not adequately maintained.
[40CFR§63.1209(p), 45CSR34. (033-040)]

5.1.19. The permittee must prepare and at all times operate according to startup, shutdown, and malfunction (SSM) plan requirements in accordance with 40CFR§63.6(e)(3). The SSM Plan shall include a description of potential causes of malfunctions, including releases from emergency safety vents, that may result in significant releases of Hazardous Air Pollutants (HAP), and actions the source is taking to minimize the frequency and severity of those malfunctions. The SSM plan shall:

a. Ensure that, at all times, the owner or operator operates and maintains the fluidized bed incinerator, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by the standard.

b. Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

c. Reduce the reporting burden associated with periods of startup, shutdown, and malfunction, including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation.

[40CFR§63.1206(c)(2), 40CFR§63.6(e)(3), 45CSR34. (033-040)]

5.1.20. The permittee must develop and at all times operate according to an Operation and Maintenance (O&M) Plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.
[40CFR§63.1206(c)(7), 45CSR34. (033-040)]

5.1.21. The permittee must prepare a continuous monitoring system (CMS) performance evaluation plan to implement the CMS quality control program and specify how the source will maintain calibration of the CMS and minimize malfunctions. Each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

a. Initial and any subsequent calibration of the CMS;
b. Determination and adjustment of the calibration drift of the CMS;
c. Preventive maintenance of the CMS, including spare parts inventory;
d. Data recording, calculations, and reporting;
e. Accuracy audit procedures, including sampling and analysis methods; and
f. Program of corrective action for a malfunctioning CMS.

[40CFR§63.8(d)(2) & Appendix to 40CFR63, Subpart EEE, 45CSR34. (033-040)]

5.1.22. The permittee must develop and implement an operator training and certification (OTC) program. Control room operators must be trained and certified in accordance with 40CFR§63.1206(c)(6)(iii). A minimum of one certified control room operator shall be on duty at the site at all times while the fluidized bed incinerator is in operation.
[40CFR§63.1206(c)(6), 45CSR34. (033-040)]

5.1.23. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Condition 5.1.24.
[45CSR§7-3.1. (033-021, 033-207, 033-221)]

5.1.24. The provisions of Condition 5.1.23 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2. (033-021, 033-207, 033-221)]

5.1.25. Particulate matter emissions from the PAC silo baghouse shall not exceed 0.01 lbs/hr. Particulate matter emissions from the Sulfur silo baghouse shall not exceed 0.05 lbs/hr.
[45CSR§30-12.7, 45CSR§7-4.1, 45CSR13, Permit No. R13-842. (033-207, 033-221)]

5.1.26. No waste material with a vapor pressure greater than 5.2 kPA (0.75 psia) shall be stored in the new FBI Waste Tank.
[Permit No. R13-0842 (Condition A.8.) (9100-772)]

5.1.27. Waste flow from the new FBI Waste Tank to the fluidized bed incinerator shall not exceed 5.32 MM lb/yr.
[Permit No. R13-0842 (Condition A.9.) (9100-772)]

5.2. Monitoring Requirements

5.2.1. Compliance with the SO2 limits of Condition 5.1.8 shall be shown by following the approved Rule 10 Monitoring Plan, submitted on February 28, 2001. This plan is attached as Appendix B to this Permit.
[45CSR10 Monitoring Plan]

5.2.2. Compliance with the 1.0 lb/hr Toluene Diisocyanate Residue emission limitation established for the TDI Residue baghouse (033-021) shall be demonstrated as described below:

a. The Permittee shall determine and keep records of TDI Residue usage. The Permittee shall keep such records on site.
b. The permittee shall practice the proper operation of the dust collection system, which includes conducting pressure drop measurements on a semi-monthly basis.

[45CSR§30-5.1.c.]

5.2.3. Maximum hourly sulfur dioxide emissions shall be determined by a continuous sulfur dioxide analyzer. The SO_2 analyzer shall meet the requirements set forth in 40CFR60, Appendix B, Performance Specification 2. The Company shall, by written notice, inform the Secretary of the dates of installation and certification testing of the SO_2 analyzer.
[Consent Order CO-SIP-2000-02 (Condition V.5.), Permit No. R13-0842 (Condition A.4.)]

5.2.4. Sulfur dioxide and nitrogen oxides emissions shall be determined by monthly totalization of continuous hourly sulfur dioxide and nitrogen oxides analyzers. The facility shall submit quarterly reports showing the total mass of sulfur dioxide and nitrogen oxides, and showing the year to date total in tons per year of sulfur dioxide and nitrogen oxides emissions. These reports will be due no later than fifteen (15) days following the end of the previous quarter, after the installation of the SO_2 analyzer.
[Permit No. R13-0842 (Condition A.5.)]

5.2.5. The powdered activated carbon (PAC) system shall add the PAC to the fluid-bed incinerator's flue gas stream prior to the wet scrubbing system. Storage of the PAC shall be in a silo, with emissions from its vent controlled by a fabric filter. The fabric filter shall be inspected and maintained on a regular basis. During loading of the silo, visual observation, for emissions from the stack and fugitive emissions from the filter, shall be conducted. The observations shall be noted in the daily operating record.
[Permit No. R13-0842 (Condition A.6.)]

5.2.6. At least quarterly, visual emission checks of each emission point subject to an opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within twenty-four (24) hours. However, a 45CSR§7A-2.1.a,b

evaluation shall not be required more than once per month per emission unit. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
[45CSR§30-5.1.c (033-021, 033-207, 033-221)]

5.2.7. Compliance with the 0.01 lbs/hr particulate matter emission limitation established for the PAC silo baghouse (033-207) and 0.05 lbs/hr particulate matter emission limitation established for the Sulfur Silo baghouse (033-221) shall be demonstrated as described below:

a. The Permittee shall determine and keep records of Powdered Activated Carbon and Sulfur usage. The Permittee shall keep such records on site.

b. The permittee shall practice the proper operation of the dust collection systems which includes conducting pressure drop measurements on a quarterly basis.
[45CSR§30-5.1.c.]

5.3. Testing Requirements

5.3.1. Any emissions test conducted to determine compliance with the hourly emissions limitations set forth in Condition 5.1.8 of this permit shall be conducted during periods which are representative of the maximum normal emission rates for each of the specified pollutants. It shall be the responsibility of the permittee to clearly demonstrate that such tests are representative of the maximum emission rates with respect to waste firing rates and practices, waste sulfur content, and other parameters potentially affecting pollutant emission rates.
[Permit No. R13-0842 (Condition B.3.)]

5.3.2. (d) Frequency of testing. The Permittee must conduct testing periodically as prescribed in paragraphs (d)(1) through (d)(3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. You may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test.

(1) Comprehensive performance testing. The Permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test used to show compliance with 40CFR§63.1219.

(2) Confirmatory performance testing. The Permittee must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test used to show compliance with 40CFR§63.1219. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.

(3) Duration of testing. You must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on

your documentation in writing of factors beyond your control that prevent you from meeting the 60-day deadline.
[40CFR§§63.1207(d)(1-3), 45CSR34. (033-040, 033-070, 033-083)]

5.4. Recordkeeping Requirements

5.4.1. The Permittee shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of the following sources Fluidized Bed Incinerator (033-040), as well as any malfunction of air pollution control equipment or any periods during which a control device was inoperative. The Permittee shall maintain these records on site for a period of not less than five (5) years.
[Consent Order CO-SIP-2000-02 (Condition VI.2.)]

5.4.2. The permittee shall maintain the following records to be made available at the request of the Secretary, or his duly authorized representative:
(a) Hourly feed rates of wastes and auxiliary fuel.
(b) Hours of operation of the incinerator, including date and time of automatic waste feed cut-off.
(c) Vapor pressure data for each shipment of waste material stored in the FBI Waste Tank.

Records shall be maintained for at least three (3) years and may be integrated with any records required under DAQ Regulation 25 permit for this incinerator.
[Permit No. R13-0842 (Condition B.5.)]

5.4.3. The permittee must keep a copy of all data recorded by continuous monitoring systems (CMS) (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods) and copies of all notification, reports, plans and other documents submitted to the Administrator in a form suitable and readily available for expeditious inspection and review.
[40CFR§§63.10(b) & (c), 45CSR34. (033-040)]

5.4.4. The permittee must maintain a record of changes that will not adversely affect compliance with the emission standards or operating requirements, and must document the change upon making such change.
[40CFR§63.1206(b)(5)(ii), 45CSR34. (033-040)]

5.4.5. The permittee must maintain a copy of the calculation of the hazardous waste residence time for the fluidized bed incinerator, and include the calculation in the operating log.
[40CFR§63.1206(b), 45CSR34. (033-040)]

5.4.6. The permittee shall maintain a copy of the Start-up, Shutdown, and Malfunction (SSM) Plan on site.
[40CFR§63.1206(c)(2)(iv), 45CSR34. (033-040)]

5.4.7. The permittee shall keep a copy of any documentation of investigation and evaluation of excessive exceedences during malfunctions.
[40CFR§63.1206(c)(2)(v)(A)(3)(ii), 45CSR34. (033-040)]

5.4.8. The permittee shall keep a copy of any documentation of investigation and corrective measures taken for any automatic waste feed cutoffs that result in an exceedance of an emission standard of operating parameter limit.
[40CFR§63.1206(c)(3)(v), 45CSR34. (033-040)]

5.4.9. The permittee shall keep a copy of any documentation and results of the automatic waste feed cutoff operability testing.
[40CFR§63.1206(c)(3)(vii), 45CSR34. (033-040)]

5.4.10. The permittee shall keep a copy of the Operator Training and Certification program.
[40CFR§63.1206(c)(6)(vii), 45CSR34. (033-040)]

5.4.11. The permittee shall keep a copy of the Operation and Maintenance (O&M) Plan.
[40CFR§63.1206(c)(7)(i)(D), 45CSR34. (033-040)]

5.4.12. The permittee shall keep a copy of the Feedstream Analysis Plan.
[40CFR§63.1209(c)(2), 45CSR34. (033-040)]

5.4.13. The permittee shall maintain documentation that the specification for activated carbon and dioxin/furan inhibitor are equivalent in level of control and effectiveness to that used in the Compliance Performance Test (CPT).
[40CFR§§63.1209(k)(6)(iii), (k)(7)(ii), and (k)(9)(ii), 45CSR34. (033-040)]

5.4.14. The permittee shall keep a copy of all documentation of compliance.
[40CFR§63.1211(c), 45CSR34. (033-040)]

5.5. Reporting Requirements

5.5.1. When demonstrating compliance using a reference test method under 40 CFR part 60, Appendix A, the Permittee shall be required to submit a test protocol to the Secretary for approval at least thirty (30) days prior to the projected test dates. The Secretary shall be provided written notice of the actual test dates after approval of the test protocol, but not less than fifteen (15) days prior to the first date of testing.
[45CSR§30-5.1.c.]

5.5.2. The Permittee shall report to the Secretary, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Permittee shall file a written report concerning the malfunction with the Secretary within ten (10) days, providing the following information:

A. A detailed explanation of the factors involved or causes of the malfunction;
B. The date and time of duration (with starting and ending times) of the period of excess emissions;
C. An estimate of the total amount of excess emissions discharged during the malfunction period;
D. The maximum emission rate determined during the malfunction in units of the applicable missions standard;
E. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction and;
F. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[Consent Order CO-SIP-2000-02 (Condition VI.3.)]

5.5.3. In accordance with 40CFR§60.7(c), the owner or operator shall submit an excess emissions and monitoring systems performance report for sulfur dioxide and nitrogen oxides to the Director on a quarterly basis. All reports shall be postmarked by the fifteenth day following the end of each calendar quarter. Written reports of excess emissions shall include the following information:

(a) The magnitude of excess emission computed in accordance with 40CFR§60.13(h), and conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(b) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction, the corrective action taken or preventative measures adopted.

(c) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(d) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

The summary report form shall contain the information and be in the format shown in Figure 1 of 40CFR§60.7(d), unless otherwise specified by the Director. One summary report form shall be submitted for each of the following pollutants: sulfur dioxide and nitrogen oxides. The summary report shall follow the guidelines set forth in 40CFR§60.7(d)(1) and 40CFR§60.7(d)(2).

The owner or operator shall adhere to the guidelines set forth in 40CFR§60.7(e).

In addition, sulfur dioxide and nitrogen oxides emissions shall be determined by monthly totalization of continuous hourly sulfur dioxide and nitrogen oxides analyzers. The facility shall submit quarterly reports showing the total mass of sulfur dioxide and nitrogen oxides, and showing the year to date total in tons per year of sulfur dioxide and nitrogen oxides emissions. These reports will be due no later than fifteen (15) days following the end of the previous quarter, after the installation of the SO_2 analyzer.
[Permit No. R13-0842 (Condition B.6, B.8, and B.9.), Consent Order CO-SIP-2000-02 (Condition V.5.)]

5.5.4. The permittee shall submit semi-annual reports on startups, shutdowns and malfunctions. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period.
[40CFR§63.10(d)(5)(i), 45CSR34. (033-040)]

5.5.5. The permittee must submit semiannual reports on excessive emissions and continuous monitoring system performance reports and summary report. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber during a 60-day block period, you must submit a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken.
[45CSR16, 40CFR§60.10(e)(3), 40CFR§63.1206(c)(3)(vi), 45CSR34. (033-040)]

5.5.6. The permittee shall report immediately on startups, shutdowns and malfunctions if necessary. Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event.
[40CFR§63.10(d)(5)(ii), 45CSR34. (033-040)]

5.5.7. Notification of compliance—

(1) Comprehensive performance test.

(i) Except as provided by paragraph (4) of this section, within 90 days of completion of a comprehensive performance test, you must postmark a Notification of Compliance documenting compliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under 40CFR§63.1209.

(ii) Upon postmark of the Notification of Compliance, you must comply with all operating requirements specified in the Notification of Compliance in lieu of the limits specified in the Documentation of Compliance required under 40CFR§63.1211(c).

(2) *Confirmatory performance test.* Except as provided by paragraph (j)(4) of this section, within 90 days of completion of a confirmatory performance test, you must postmark a Notification of Compliance documenting compliance or noncompliance with the applicable dioxin/furan emission standard.

(3) See 40CFR§§63.7(g) 63.9(h), and 63.1210(d) for additional requirements pertaining to the Notification of Compliance (e.g., you must include results of performance tests in the Notification of Compliance).

(4) *Time extension.* You may submit a written request to the Administrator for a time extension documenting that, for reasons beyond your control, you may not be able to meet the 90-day deadline for submitting the Notification of Compliance after completion of testing. The Administrator will determine whether a time extension is warranted.

[40CFR§§63.1207(j)(1-4), 45CSR34. (033-040, 033-070, 033-083)]

5.6. Compliance Plan

N/A

6.0 HCl and SL

6.1. Limitations and Standards

6.1.1. The maximum total throughput of 36% HCl shall not exceed 48,000,000 gallons in any twelve rolling month period.
[45CSR§30-12.7.]

6.1.2. Emissions from the HCl Storage Tanks 1501, 1502, and 1503 (5300-648, 5300-021, and 5300-545) shall each be vented to one of the following Scrubbers; 5300-052, 5300-624, and 5300-701.
[45CSR§30-12.7. (5300-648, 5300-021, 5300-545)]

6.1.3. The flow rate of the scrubber liquor of each Scrubber in the one tank scrubbing system shall be maintained at greater than or equal to 6 gallons per minute.
[45CSR§30-12.7. (5300-052, 5300-624, 5300-701)]

6.1.4. No person shall cause, suffer, allow, or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Condition 6.1.5.
[45CSR§7-3.1. (15NN and 15OO)]

6.1.5. The provisions of Condition 6.1.4. shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2. (15NN and 15OO)]

6.1.6. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7.

Hydrochloric acid mist and/or vapor for source operations installed after July 1, 1970: 210 mg/m^3

[45CSR§7-4.2 and Table 45-7B. (15NN and 15OO)]

6.1.7. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1. (15NN and 15OO)]

6.2. Monitoring Requirements

6.2.1. The Permittee shall monitor the amount of HCl transferred on a daily basis and summarize monthly. The total amount shall be assumed to be equally distributed among the three storage tanks for the purposes of emissions calculations.
[45CSR§30-5.1.c.]

6.2.2. The Permittee shall monitor the flow rate of scrubber liquor to Scrubbers 5300-052, 5300-624, and 5300-701 and summarize monthly.
[45CSR§30-5.1.c.]

6.2.3. A routine program shall be established and performed to ensure the minimization of fugitive emissions. This program shall include:
a) A minimum of weekly walk-throughs to examine equipment for leaks using visual and olfactory means.
b) The documentation of any equipment leaks.
c) Prompt isolation or repair of any leaks.
[45CSR§30-5.1.c.]

6.2.4. The Permittee shall monitor the amount of isocyanates transferred on a daily basis and summarize monthly. The total amount of isocyanates shall be assumed to be equally distributed among the all storage tanks for the purposes of emissions calculations.
[45CSR§30-5.1.c]

6.3. Testing Requirements

N/A

6.4. Recordkeeping Requirements

6.4.1. The Permittee shall maintain monthly summaries of the following records:
a. Amount of HCl transferred
b. Water flow rate to Scrubbers 5300-052, 5300-624, and 5300-701.
c. A record of walk-throughs to examine equipment for leaks.
[45CSR§30-5.1.c.]

6.4.2. The Permittee shall maintain records of the isocyanates transferred in the HCL and SL Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

6.5. Reporting Requirements

N/A

6.6. Compliance Plan

N/A

7.0 Polyols

7.1. Limitations and Standards

7.1.1. Emissions to the atmosphere of regulated air pollutants shall not exceed the hourly and annual limits in the following table:

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP1 {Scrubber 011-1159}	Eight Reactors {011-027.1R, 011-027.2R, 011-027.3R, 011-027.4R, 011-027.5R, 011-027.6R, 011-027.9R, and 011-027.10R} Eight Neutralizers {011-034.1, 011-034.2, 011-034.3, 011-034.4, 011-034.5, 011-034.6, 011-034.7, and 011-034.8}	Ethylene Oxide†	0.69	0.46
		Propylene Oxide†	0.28	1.22
		Ethylene Glycol‡	0.01	0.01
		Diethylene Glycol‡	0.01	0.01
		VOC	1.83	5.41
		Sulfuric Acid	0.01	0.01
EP3B	Far East Blend Tank Vent (011-740)	VOC	0.01	0.01
		ODS	154*	13.77
EP3C	PVP60A/B {East Blend Tank Vent (011-610)}	VOC	0.01	0.01
		ODS	154*	13.77
EP3E	PVP62A/B {Middle Blend Tank Vent (011-115.1)}	VOC	0.01	0.01
		ODS	154*	13.77
EP3G	PVP64A/B {West Blend Tank Vent (011-115.2)}	VOC	0.01	0.01
		ODS	154*	13.77
EP4	STV38 {NIAX 3428 storage tank (011-543)}	VOC	0.05	0.16
EP7	STV41 {Fyrol PCF storage tank (011-540)}	VOC	0.05	0.17
EP15	STV1 (Polyol storage tank (011-87.01)}	VOC	0.03	0.08
EP16	STV2 (Polyol storage tank (011-87.02)}	VOC	0.03	0.08
EP17	STV3 {Polyol storage tank (011-87.03)}	VOC	0.03	0.08
EP18	STV4 {Polyol storage tank (011-87.04)}	VOC	0.03	0.08
EP19	STV5 {Polyol storage tank (011-87.05)}	VOC	0.03	0.08
EP20	STV6 {Polyol storage tank (011-87.06)}	VOC	0.03	0.08
EP21	STV7 {Polyol storage tank (011-87.07)}	VOC	0.03	0.08
EP22	STV8 {Polyol storage tank (011-87.08)}	VOC	0.03	0.08
EP23	STV9 {Polyol storage tank (011-87.09)}	VOC	0.03	0.08
EP24	STV10 {Polyol storage tank (011-87.10)}	VOC	0.03	0.08
EP25	STV11 {Polyol storage tank (011-87.11)}	VOC	0.03	0.08

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP26	STV12 {Polyol storage tank (011-87.12)}	VOC	0.03	0.08
EP27	STV13 {Polyol storage tank (011-87.13)}	VOC	0.03	0.08
EP28	STV14 {Polyol storage tank (011-87.14)}	VOC	0.03	0.08
EP29	STV15 {Polyol storage tank (011-87.15)}	VOC	0.03	0.08
EP30	STV16 {Polyol storage tank (011-86.1)}	VOC	0.05	0.18
EP31	STV17 {Polyol storage tank (011-86.2)}	VOC	0.05	0.18
EP32	STV18 {Polyol storage tank (011-86.3)}	VOC	0.05	0.18
EP33	STV19 {Polyol storage tank (011-86.4)}	VOC	0.05	0.18
EP34	STV20 {Polyol storage tank (011-86.5)}	VOC	0.05	0.18
EP35	STV21 {Polyol storage tank (011-86.6)}	VOC	0.05	0.18
EP36	STV22 {Polyol storage tank (011-86.7)}	VOC	0.03	0.08
EP37	STV23 {Polyol storage tank (011-170.1)}	VOC	0.29	1.00
EP38	STV24 {Polyol storage tank (011-593)}	VOC	0.03	0.08
EP40	STV26 {Polyol storage tank (011-742)}	VOC	0.03	0.05
EP42	STV27 {SW blend (E-9242) storage tank (011-662)}	VOC	0.24	1.03
EP43	STV28 {SE blend (E-9242) storage tank (011-611.1)}	VOC	0.24	1.03
EP44	STV29 {East blend (PS-2502A) storage tank (011-570.1)}	VOC	0.24	1.03
EP45	STV30 {Middle blend (E-8206) storage tank (011-570.2)}	VOC	0.24	1.03
EP46	STV31 {West blend (E-9737) storage tank (011-570.3)}	VOC	0.24	1.03
EP47	PVP53 {Filter feed tank (011-163.1)}	VOC	0.14	0.48
EP60	Cold glycol tank (011-081)	Ethylene Glycol‡ VOC	0.01 0.01	0.01 0.01
EP61	Hot glycol tank (011-012)	Ethylene Glycol‡ VOC	0.01 0.01	0.01 0.01
EP66A	Rail car loading (001-001)	VOC	1.14	4.99
EP66B	Rail car loading (001-002)	VOC	1.14	4.99
EP66C	Rail car loading (001-003)	VOC	1.14	4.99
EP66D	Rail car loading (001-004)	VOC	1.14	4.99
EP66F	Rail car loading (001-005)	VOC	1.14	4.99
EP67A	Trailer loading (002-001)	ODS	93*	3.54
EP67B	Trailer loading (002-002)	ODS	93*	3.54

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP67C	Trailer loading (002-003)	VOC ODS	1.14 93*	4.44 3.54
EP67D	Trailer loading (002-004)	VOC ODS	1.14 93*	4.44 3.54
EP68A	Trailer loading (003-001)	VOC ODS	1.14 93*	4.44 3.54
EP68B	Trailer loading (003-002)	VOC ODS	1.14 93*	4.44 3.54
EP69A	Trailer loading (004-001)	VOC ODS	1.14 93*	4.44 3.54
EP69B	Trailer loading (004-002)	VOC ODS	1.14 93*	4.44 3.54
EP70	Drum/tote filling (005)	VOC ODS	1.14 93*	4.99 1.44
EP71	Trailer loading (006)	VOC ODS	1.14 93*	4.44 3.54
EP72	STV32 Storage Tank	VOC	0.50	2.00

* Emission limit is in pounds per batch (PPB)
† Toxic Air Pollutant (TAP).
‡ Hazardous Air Pollutant (HAP).
T Trace quantities.
VOC Volatile Organic Compound
ODS Ozone Depleting Substance
PM_{10} Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.
[45CSR13, Permit No. R13-2443 (Condition A.1.)]

7.1.2. The following emission points have trace emissions of regulated air pollutants. The permittee shall notify the Director of the Division of Air Quality prior to any change of service of the following equipment for the use with a compound with a higher vapor pressure than that currently utilized and document any change in potential emissions.

Emission Point ID #	Sources Vented through this Emission Point	Pollutant
EP3A	PVP59A/B {Far East Blend Premix Tank (011-741)}	VOC
EP3D	PVP61A/B {East Blend Premix Tank (011-609.3)}	VOC
EP3F	PVP63A/B {Middle Blend Premix Tank (011-609.1)}	VOC
EP3H	PVP65A/B {West Blend Premix Tank (011-609.2)}	VOC
EP3I	Neutralizer Blend Tank (011-034.3)	VOC
EP3J	Wiped Film Evaporator (011-051.1)	VOC
EP5	STV39 {Propylene glycol storage tank (011-569)}	VOC

Emission Point ID #	Sources Vented through this Emission Point	Pollutant
EP6	STV40 {Glycerine storage tank (011-015)}	VOC
EP8	PVP42A, PVP42B, PVP42C {o-TDA storage tank (011-735)}	VOC
EP9	STV43 {m-TDA storage tank (011-137)}	VOC
EP10	STV44 {Ethylene diamine storage tank (011-010)}	VOC
EP11	STV45 {Propylene glycol start media storage tank (011-160.1)}	VOC
EP12	STV46 {Glycerine start media storage tank (011-160.2)}	VOC
EP13	STV47 {93% Sulfuric acid storage tank (011-019)}	Sulfuric Acid
EP14	STV48 {46% KOH storage tank (011-513)}	*
EP39	STV25 {Polyol (E-9143) storage tank (011-630)}	VOC
EP41	STV75 {Polyol storage tank (011-857)}	VOC
EP48	PVP71 {Evap. feed tank (011-056.1A/B)}	VOC
EP49	PVP72 {Product hold tank (011-060.1A/B)}	VOC
EP50	PVP73A {Product hold tank (011-056.2A)}	VOC
EP51	PVP73B {Product hold tank (011-056.2B)}	VOC
EP52	PVP74A {Product hold tank (011-060.2A)}	VOC
EP53	PVP74B {Product hold tank (011-060.2B)}	VOC
EP54	PVP54 {Terate 552 storage tank (011-163.2)}	VOC
EP55	East sugar weigh tank (011-789)	PM_{10}
EP56	West sugar weigh tank (011-790)	PM_{10}
EP57	Wastewater tank (011-845)	*
EP58	Wastewater tank (011-850)	*
EP59	Carbon black paste tank (011-1176)	PM_{10}

* This emission point currently does not emit any regulated air pollutant.

[45CSR13, Permit No. R13-2443 (Condition A.2.)]

7.1.3. The total annual throughput shall not exceed 151,619,600 gallons for the following storage tanks:

Emission Point ID #	Sources Vented through this Emission Point
EP15	STV1 (Polyol storage tank (011-87.01)}
EP16	STV2 (Polyol storage tank (011-87.02)}
EP17	STV3 {Polyol storage tank (011-87.03)}
EP18	STV4 {Polyol storage tank (011-87.04)}
EP19	STV5 {Polyol storage tank (011-87.05)}

Emission Point ID #	Sources Vented through this Emission Point
EP20	STV6 {Polyol storage tank (011-87.06)}
EP21	STV7 {Polyol storage tank (011-87.07)}
EP22	STV8 {Polyol storage tank (011-87.08)}
EP23	STV9 {Polyol storage tank (011-87.09)}
EP24	STV10 {Polyol storage tank (011-87.10)}
EP25	STV11 {Polyol storage tank (011-87.11)}
EP26	STV12 {Polyol storage tank (011-87.12)}
EP27	STV13 {Polyol storage tank (011-87.13)}
EP28	STV14 {Polyol storage tank (011-87.14)}
EP29	STV15 {Polyol storage tank (011-87.15)}
EP30	STV16 {Polyol storage tank (011-86.1)}
EP31	STV17 {Polyol storage tank (011-86.2)}
EP32	STV18 {Polyol storage tank (011-86.3)}
EP33	STV19 {Polyol storage tank (011-86.4)}
EP34	STV20 {Polyol storage tank (011-86.5)}
EP35	STV21 {Polyol storage tank (011-86.6)}
EP36	STV22 {Polyol storage tank (011-86.7)}
EP37	STV23 {Polyol storage tank (011-170.1)}
EP38	STV24 {Polyol storage tank (011-593)}
EP40	STV26 {Polyol storage tank (011-742)}
EP42	STV27 {SW blend storage tank (011-662)}
EP43	STV28 {SE blend storage tank (011-611.1)}
EP44	STV29 {East blend storage tank (011-570.1)}
EP45	STV30 {Middle blend storage tank (011-570.2)}
EP46	STV31 {West blend storage tank (011-570.3)}
EP47	PVP53 {Filter feed tank (011-163.1)}

[45CSR13, Permit No. R13-2443 (Condition A.3.)]

7.1.4. The total annual throughput shall not exceed the listed amount for the following storage tanks:

Emission Point ID #	Sources Vented through this Emission Point	Annual Throughput Limit (gallons)
EP4	STV38 {NIAX 3428 storage tank (011-543)}	1,622,800
EP7	STV41 {Fyrol PCF storage tank (011-540)}	332,300
EP8	o-TDA storage tank (011-735)	5,736,698

[45CSR13, Permit No. R13-2443 (Condition A.4.)]

7.1.5. The daily and total annual throughput shall not exceed the listed throughput rates for the following loading areas:

Loading Area ID #	Loading Area Description	Daily Throughput (gallons)	Annual Throughput (gallons)
001	Rail car loading area	960,000	225,169,000
002	Trailer loading area	1,003,000	366,168,000
003	Trailer loading area		
004	Trailer loading area		
005	Drum/tote filling		

[45CSR13, Permit No. R13-2443 (Condition A.5.)]

7.1.6. The portions of consent order CO-R27-91-21 pertaining to ethylene oxide and propylene oxide, including Attachments A1, A2, B1, and B2, are superseded and replaced by this permit. All other portions of consent order CO-R27-91-21 are intact and valid.
[45CSR13, Permit No. R13-2443 (Condition A.6.) State-Enforceable Only]

7.1.7. Emission standards.

(a) Except as provided under paragraph (b) of this Condition, the owner or operator of an existing or new affected source shall comply with the provisions in:
(1) Sections 63.1425 through 63.1430 for process vents;
(2) Section 63.1432 for storage vessels;
(3) Section 63.1433 for wastewater;
(4) Section 63.1434 for equipment leaks;
(5) Section 63.1435 for heat exchangers;
(6) Section 63.1437 for additional test methods and procedures;
(7) Section 63.1438 for monitoring levels and excursions; and
(8) Section 63.1439 for general reporting and recordkeeping requirements.

(b) When emissions of different kinds (i.e., emissions from process vents subject to §§63.1425 through 63.1430, storage vessels subject to §63.1432, process wastewater, and/or in-process equipment subject to §63.149) are combined, and at least one of the emission streams would require control according to the applicable provision in the absence of combination with other emission streams, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (2) of this Condition.
(1) Comply with the applicable requirements of this subpart for each kind of emission in the

stream as specified in paragraphs (a)(1) through (5) of this Condition; or

(2) Comply with the most stringent set of requirements that applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as requiring control in the absence of combination with other emission streams, or the owner chooses to consider that emission stream to require control for the purposes of this paragraph.

[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§63.1424]

7.1.8. Process vent control requirements.

(b) *Requirements for epoxide emissions.* The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions form process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(1) or (2) of this Condition.

(1) For new affected sources, the owner or operator shall comply with paragraph (b)(1)(i), (ii), or (iii) this Condition. The owner or operator also has the option of complying with a combination of paragraphs (b)(1)(i) and (ii) of this Condition. If the owner or operator chooses to comply with a combination of paragraphs (b)(1)(i) and (ii) of this Condition, each process vent not controlled in accordance with paragraph (b)(1)(ii) of this Condition shall be part of the group of applicable process vents that shall then comply with paragraph (b)(1)(i) of this Condition.

(i) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 99.9 percent;

(ii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture, or recovery device of 20 ppmv or less; or

(iii) Maintain an emission factor of no greater than 4.43×10^{-3} kilogram epoxide emissions per megagram of product (4.43×10^{-3} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(2) For existing affected sources, the owner or operator shall comply with either paragraph (b)(2)(i), (ii), (iii), or (iv) of 40CFR§63.1425. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(ii) and (iii) of this Condition. If the owner or operator chooses to comply with a combination of paragraphs (b)(2)(ii) and (iii) of this Condition, each process vent that is not controlled in accordance with paragraph (b)(2)(iii) of this Condition shall be part of the group of applicable process vents that shall then comply with paragraph (b)(2)(ii) of this Condition. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(i) and (iii) of this Condition.

(i) Reduce the total epoxide emissions from each process vent using a flare;

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

(iii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture or recovery devices of 20 ppmv or less; or

Maintain an emission factor of no greater than 1.69×10^{-2} kilogram epoxide emissions per megagram of product (1.69×10^{-2} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§63.1425]

7.1.9. Except as provided in 45CSR§27-3.2 and 3.3, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in 45CSR27 Table A shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-3.1 State-Enforceable only]

7.1.10. All owners and operators subject to the requirements of this rule shall, by application of BAT, prevent and control fugitive emissions to the air of toxic air pollutants as a result of leakage from equipment in toxic air pollutant service including but not limited to, pump seals, compressor seals, valves, sampling connections,

open-ended lines, safety relief valves, and flanges. In no event shall any equipment standard, program, or work practice less stringent than required under 40CFR61, Subpart V be deemed to represent BAT for control of toxic air pollutant emissions: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation and standard. Equipment to be used in toxic air pollutant service installed after the effective date of this rule shall, to the maximum extent possible, be designed and operated so as to prevent leaks of toxic air pollutants.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-4.1 State-Enforceable only]

7.1.11. Owners and operators of chemical processing units or facilities subject to the requirements of this rule shall prevent and control working and filling losses of toxic air pollutants from tanks by routing such tank emissions to BAT control devices. The Director may approve the use of floating roof storage tanks as BAT, provided that such tanks are designed and operated in a manner which minimizes toxic air pollutant emissions taking into consideration the toxic air pollutant emission rate, tank size, and control efficiency associated with such tanks. On a case-by-case basis, the Director may exempt very small process or storage tanks or tanks storing material mixtures containing low mass fractions of toxic air pollutants from the BAT requirements taking into consideration the actual level of emissions control and/or the toxic air pollutant emission rate from the tank.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-5.1 State-Enforceable only]

7.1.12. Owners and operators of chemical processing units and/or wastewater treatment systems subject to this rule shall employ BAT to remove and control or destroy toxic air pollutants from wastewater at the source and/or apply BAT at the wastewater treatment plant to prevent or control the discharge to toxic air pollutants resulting from air stripping or evaporation: Provided, that this provision shall not be more stringent than any specifically applicable federal regulation or standard.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-6.1 State-Enforceable only]

7.1.13. Owners and operators of chemical processing units or facilities subject to the requirements of this rule shall employ BAT to prevent or control toxic air pollutant discharges in the loading and unloading of railcars and tank trucks with toxic air pollutants or material mixtures containing toxic air pollutants.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-7.1 State-Enforceable only]

7.1.14. Due to unavoidable malfunction of equipment or other conditions resulting in emissions exceeding a level established in the compliance program, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-12.1 State-Enforceable only]

7.1.15. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2443 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-2443 (Condition C.3.)]

7.2. Monitoring Requirements

7.2.1. The following operating parameters of the ethylene oxide and propylene oxide scrubber (011-1159) shall be maintained while the polyol unit is on-line:
a) The scrubbing liquor flow rate shall maintained at 55 gpm or greater. The liquor flow rate shall be recorded at least every 15 minutes. The permittee shall report all values that are below 55 gpm and all instances when monitoring data is not collected.

b) The pH of the scrubbing liquor shall be maintained at 1.0 or lower. The permittee shall sample and test the pH of the scrubbing liquor at least once a day. The permittee shall report all values that are above 1.0 pH and all instances when monitoring data is not collected.
[Permit No. R13-2443 (Condition B.1-4.), 45CSR34, 40CFR§§63.1429(a) and (d)]

7.2.2. Wastewater provisions.

(b) *Maintenance wastewater.* The owner or operator of each affected source shall comply with the HON maintenance wastewater requirements in §63.105, with the exceptions noted in paragraphs (b) (1), (2), and (3) of 40CFR§63.1433.

(1) When the HON maintenance wastewater provisions in §63.105(a) refer to "organic HAPs listed in Table 9 of subpart G of this part," the owner or operator is only required to consider compounds that meet the definition of *organic HAP* in §63.1423 and that are listed in Table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(2) When the term "maintenance wastewater" is used in the HON maintenance wastewater provisions in §63.105, the definition of "maintenance wastewater" in §63.1423 shall apply, for the purposes of this subpart.

(3) When the term "wastewater" is used in the HON maintenance wastewater provisions in §63.105, the definition of "wastewater" in §63.1423 shall apply, for the purposes of this subpart.

[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§63.1433]

7.2.3. Equipment leak provisions.

(a) The owner or operator of each affected source shall comply with the HON equipment leak requirements in 40 CFR part 63, subpart H for all equipment in organic HAP service, except as specified in this Section.

(f) The Periodic Reports required by §63.182(a)(3) and §63.182(d) may be submitted as part of the Periodic Reports required by §63.1439(e)(6).

(g) If specific items of equipment, comprising part of a process unit subject to this subpart, are managed by different administrative organizations (e.g., different companies, affiliates, departments, divisions, etc.), those items of equipment may be aggregated with any PMPU within the affected source for all purposes under subpart H, providing there is no delay in achieving the applicable compliance date.

(h) The phrase "the provisions of subparts F, I, or PPP of this part" shall apply instead of the phrase "the provisions of subparts F or I of this part," and instead of the phrase "the provisions of subpart F or I of this part" throughout §§63.163 and 63.168, for the purposes of this subpart. In addition, the phrase "subparts F, I, and PPP" shall apply instead of the phrase "subparts F and I" in §63.174(c)(2)(iii), for the purposes of this subpart.

[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§63.1434]

7.3. Testing Requirements

7.3.1. Any emissions test conducted to determine compliance with the hourly emissions limitations set forth in Condition 7.1.7 of this permit shall be conducted in accordance with 40CFR§§63.1437(a) and (b).
[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§§63.1437(a) and (b)]

7.3.2. Parameter monitoring levels and excursions.

(e) *Monitoring violations.*

(1) With the exception of excursions excused in accordance with paragraph (g) of this Condition, each excursion, as defined in paragraphs (f)(1)(i), (f)(2)(i)(A), (f)(2)(ii), (f)(3)(i), and (f)(4)

of 40CFR§63.1438, constitutes a violation of the provisions of this subpart in accordance with paragraph (e)(1)(i), (ii), or (iii) of this Condition.

(i) For each condenser, each excursion constitutes a violation of the emission limit.

(ii) For each recovery or recapture device other than a condenser, where an organic monitoring device is used to monitor concentration, each excursion constitutes a violation of the emission limit.

(iii) For each combustion, recovery, or recapture device other than a condenser, each excursion constitutes a violation of the operating limit.

(2) With the exception of excursions excused in accordance with paragraph (g) of this Condition, each excursion, as defined in paragraphs (f)(1)(ii), (f)(1)(iii), (f)(2)(i)(B), and (f)(3)(ii) of 40CFR§63.1438 constitutes a violation of the operating limit.

(f) *Parameter monitoring excursion definitions.* Parameter monitoring excursions are defined in paragraphs (f)(1) through (3) of 40CFR§63.1438.

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring), process vents from continuous unit operations using combustion, recovery, or recapture devices for purposes of compliance, and for process wastewater streams, an excursion means any of the three cases listed in paragraphs (f)(1)(i) through (iii) of this Condition.

(i) The daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(ii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this Condition, is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in paragraph (f)(1)(iv) of this Condition, to constitute a valid hour of data for at least 75 percent of the operating hours.

(iii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this Condition, is less than 4 hours in an operating day and more than 2 of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in paragraph (f)(1)(iv) of this Condition.

(iv) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (f)(1)(ii) and (iii) of this Condition, if measured values are unavailable due to monitoring system breakdowns, repairs, calibrated checks, or zero (low-level) and high level adjustments, for any of the 15-minute periods within the hour. For data compression systems approved under §63.1439(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(v) The periods listed in paragraphs (f)(1)(v)(A) through (D) of this Condition are not considered to be part of the period of combustion, recovery, or recapture device operation, for the purposes of paragraphs (f)(1)(ii) and (iii) of this Condition.

(A) Start-ups;

(B) Shutdowns;

(C) Malfunctions; or

(D) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(3) With respect to process vents from batch unit operations, an excursion means one of the two cases listed in paragraphs (f)(3)(i) and (ii) of this Condition.

(i) When the daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.

(ii) When monitoring data are insufficient for an operating day. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the 15-minute periods when batch emission episodes selected to be controlled are being vented to the control device during the

operating day, using the procedures specified in paragraphs (f)(3)(ii)(A) through (D) of this Condition.

(A) Determine the total amount of time during the operating day when batch emission episodes selected to be controlled are being vented to the control device.

(B) Subtract the time during the periods listed in paragraphs (f)(3)(ii)(B)(*1*) through (*4*) of this Condition from the total amount of time determined above in paragraph (f)(3)(ii)(A) of this Condition, to obtain the operating time used to determine if monitoring data are insufficient.

(*1*) Start-ups;
(*2*) Shutdowns;
(*3*) Malfunctions; or
(*4*) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(C) Determine the total number of 15-minute periods in the operating time used to determine if monitoring data are insufficient, as was determined in accordance with paragraph (f)(3)(ii)(B) of this Condition.

(D) If measured values are not available for at least 75 percent of the total number of 15-minute periods determined in paragraph (f)(3)(ii)(C) of this Condition, the monitoring data are insufficient for the operating day.

(g) *Excused excursions.* A number of excused excursions shall be allowed for each combustion, recovery, or recapture device for each semiannual period. The number of excused excursions for each semiannual period is specified in paragraphs (g)(1) through (6) of this Condition. This paragraph applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due.

(1) For the first semiannual period -- six excused excursions.
(2) For the second semiannual period -- five excused excursions.
(3) For the third semiannual period -- four excused excursions.
(4) For the fourth semiannual period -- three excused excursions.
(5) For the fifth semiannual period -- two excused excursions.
(6) For the sixth and all subsequent semiannual periods -- one excused excursion.

[45CSR13, Permit No. R13-2443 (Condition B.4.), 45CSR34, and 40 C.F.R. §63.1438]

7.4. Recordkeeping Requirements

7.4.1. The permittee shall keep and maintain on site, for a period of not less than five (5) years, accurate records of throughput for all storage tanks listed in 7.1.3. and 7.1.4. on a monthly and twelve (12) rolling month total basis. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
[45CSR13, Permit No. R13-2443 (Condition B.2.)]

7.4.2. The permittee shall keep and maintain on site, for a period of not less than five (5) years, accurate records of throughput for all loading areas listed in 7.1.5 on a monthly and twelve (12) rolling month total basis. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
[45CSR13, Permit No. R13-2443 (Condition B.3.)]

7.4.3. Process vent reporting and record keeping requirements.

(b) *Records to demonstrate compliance.* The owner or operator complying with the process vent control requirements in §63.1425(b), (c), or (d) shall keep the following records, as applicable, readily accessible:

(2) The following information when using a combustion, recovery, or recapture device (other than a flare) to achieve compliance with the process vent control requirements in §63.1425(b), (c), or (d):

(i) For a combustion, recovery, or recapture device being used to comply with a percent reduction requirement of §63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2), or the annual epoxide emission limitation in §63.1425(b)(1)(iii) or (b)(2)(iv), the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in §63.1426;

(ii) For a combustion device being used to comply with an outlet concentration limitation of §63.1425(b)(1)(ii) or (b)(2)(iii), the concentration of organic HAP or TOC outlet of the combustion device, as determined using the procedures specified in the process vent requirements in §63.1426;

(c) *Records related to the establishment of parameter monitoring levels.* For each parameter monitored according to the process vent monitoring requirements in §63.1429(a) and Table 5 of this subpart, or for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in §63.1429(b), maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in §63.1429(d).

(d) *Records to demonstrate continuous compliance.* The owner or operator that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in §63.1425(b), (c), or (d) shall keep the following records readily accessible:

(1) Continuous records of the equipment operating parameters specified to be monitored under the process vent monitoring requirements in §63.1429(a) as applicable, and listed in Table 5 of this subpart, or specified by the Administrator in accordance with the alternative parameter monitoring requirements in §63.1439(f), as allowed under §63.1429(b). These records shall be kept as specified under §63.1439(d), except as specified in paragraphs (d)(1)(i) and (ii) of this Condition.

(2) Records of the daily average value for process vents from continuous or batch unit operations of each continuously monitored parameter, except as provided in paragraphs (d)(2)(i) and (ii) of this Condition.

(i) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the daily averages. In addition, monitoring data recorded during periods of non-operation of the process (or specific portion thereof) resulting in cessation of organic HAP emissions, (or periods of start-up, shutdown, or malfunction) shall not be included in computing the daily averages.

(ii) If all recorded values for a monitored parameter during an operating day are above the minimum or below the maximum parameter monitoring level established in accordance with the process vent monitoring requirements in §63.1429(d), the owner or operator may record that all values were above the minimum or below the maximum level established, rather than calculating and recording a daily average for that operating day.

(3) Hourly records of whether the flow indicator for bypass lines specified under §63.1429(c)(1) was operating and whether a diversion was detected at any time during the hour. Also, records of the time(s) of all periods when the process vent was diverted from the combustion, recovery, or recapture device, or the flow indicator specified in §63.1429(c)(1) was not operating.

(4) Where a seal or closure mechanism is used to comply with the process vent monitoring requirements for bypass lines in §63.1429(c)(2), hourly records of flow are not required. For compliance with §63.1429(c)(2), the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanism has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line

valve position has been changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal has been broken.

(5) Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. In addition, records specifying any other periods of process or combustion, recovery, or recapture device operation when monitors are not operating.

(g) *Notification of Compliance Status.* The owner or operator of an affected source shall submit the information specified in paragraphs (g)(1) through (3) of 40CFR§63.1430, as appropriate, as part of the Notification of Compliance Status specified in §63.1439(e)(5).

(1) For the owner or operator complying with the process vent control requirements in §63.1425(b), (c)(1), (c)(3), or (d), the information specified in paragraph (b) of 40CFR§63.1430 related to the compliance demonstration, and the information specified in paragraph (c) of this Condition related to the establishment of parameter monitoring levels.

(h) *Periodic Reports.* The owner or operator of an affected source shall submit Periodic Reports of the recorded information specified in paragraphs (h)(1) through (6) of 40CFR§63.1430, as appropriate, according to the schedule for submitting Periodic Reports in §63.1439(e)(6)(i).

(1) Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under paragraph (d)(2) of this Condition were above the maximum, or below the minimum, level established in the Notification of Compliance Status or operating permit.

(2) Reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in §63.1438(f)(1)(iv), (f)(2)(i)(B), or (f)(3)(ii).

(3) Reports of the times and durations of all periods recorded under paragraph (d)(3) of this Condition when the process vent stream is diverted from the combustion, recovery, or recapture device through a bypass line.

(4) Reports of all periods recorded under paragraph (d)(4) of this Condition in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

(k) *Alternative requests.* If an owner or operator uses a combustion, recovery, or recapture device other than those specified in the process vent monitoring requirements in §63.1429(a)(1) through (7) and listed in Table 5 of this subpart; requests approval to monitor a parameter other than those specified in §63.1429(a)(1) through (7) and listed in Table 5 of this subpart; or uses ECO and requests to monitor a parameter other than those listed in §63.1427(i)(1)(iv), the owner or operator shall submit a description of planned reporting and record keeping procedures, as specified in §63.1439(f)(3), as part of the Precompliance Report as required under §63.1439(e)(4), or to the Administrator as a separate submittal. The Administrator will specify appropriate reporting and record keeping requirements as part of the review of the Precompliance Report

[45CSR34; 45CSR13, Permit No. R13-2443 (Condition B.4.) and 40CFR§63.1430]

7.4.4. General recordkeeping and reporting provisions.

(a) *Data retention.* Unless otherwise specified in this subpart, the owner or operator of an affected source shall keep copies of all applicable records and reports required by this subpart for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche. If an owner or operator submits copies of reports to the applicable EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of §63.10(a)(4)(ii) for submittal of copies of reports, the owner or operator is not required to maintain copies of reports.

(b) *Subpart A requirements.* The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR part 63, subpart A (the General Provisions) as specified in Table 1 of this subpart. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (2) of this Condition.

(1) *Start-up, shutdown, and malfunction plan.* The owner or operator of an affected source shall develop and implement a written start-up, shutdown, and malfunction plan as specified in the General Provisions' requirements for a Startup, Shutdown, and Malfunction Plan in §63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart may be included in the start-up, shutdown, and malfunction plan only if the owner or operator has demonstrated to the Administrator, through the Precompliance Report or a supplement to the Precompliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The owner or operator of the affected source shall keep the start-up, shutdown, and malfunction plan on site. In addition, if the start-up, shutdown, and malfunction plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the start-up, shutdown, and malfunction plan for a period of 5 years after each revision to the plan. If the new version of the start-up, shutdown, and malfunction plan includes a provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required, the owner or operator shall submit a supplement to the Precompliance Report to the Administrator for the Administrator's approval, documenting that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. Records associated with the plan shall be kept as specified in paragraphs (b)(1)(i)(A) and (B) of this Condition. Reports related to the plan shall be submitted as specified in paragraph (b)(1)(ii) of this Condition.

(i) The owner or operator shall keep the records specified in paragraphs (b)(1)(i)(A) and (B) of this Condition.

(A) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or combustion, recovery, or recapture devices or continuous monitoring systems used to comply with this subpart during which excess emissions (as defined in §63.1420(h)(4)) occur.

(B) For each start-up, shutdown, or malfunction during which excess emissions (as defined in §63.1420(h)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a combustion, recovery, or recapture device to a backup combustion, recovery, or recapture device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.

(ii) *Reports of start-up, shutdown, and malfunction.* For the purposes of this subpart, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under paragraph (e)(6) of this Condition instead of according to the general provisions' Periodic Reporting schedule specified in §63.10(d)(5)(i). The reports shall include the information specified in §63.10(d)(5)(i).

(2) *Application for approval of construction or reconstruction.* For new affected sources, the owner or operator shall comply with the General Provisions' requirements for the application for approval of construction or reconstruction, as specified in §63.5, excluding

the provisions specified in §63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

(c) *Subpart H requirements.* The owner or operator of an affected source shall comply with the HON equipment leak reporting and recordkeeping requirements in 40 CFR part 63, subpart H, except as specified in §63.1434(b) through (g).

(d) *Recordkeeping and documentation.* The owner or operator required to keep continuous records shall keep records as specified in paragraphs (d)(1) through (7) of this Condition, unless an alternative recordkeeping system has been requested and approved as specified in paragraph (g) of this Condition, and except as provided in paragraph (h) of this Condition. If a monitoring plan for storage vessels pursuant to §63.1432(i) requires continuous records, the monitoring plan shall specify which provisions, if any, of paragraphs (d)(1) through (7) of this Condition apply. As described in §63.1432(i), certain storage vessels are not required to keep continuous records as specified in this paragraph. The owner or operator of such storage vessels shall keep records as specified in the monitoring plan required by §63.1432(i).

(1) The monitoring system shall measure data values at least once during approximately equal 15-minute intervals.

(2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. The owner or operator of process vents from batch unit operations shall record each measured data value.

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in paragraphs (d)(3)(i) through (ii) of this Condition, except as specified in paragraphs (d)(6) and (7) of this Condition.

(i) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in paragraph (d)(7) of this Condition. The calculated average shall cover a 24-hour period if operation is continuous. If intermittent emissions episodes occur resulting in emissions being vented to a combustion, recapture, or recovery device for a period of less than 24 hours in the operating day, the daily average shall be calculated based only on the period when emissions are being vented to the combustion, recapture, or recovery device. For example, if a batch unit operation operates such that emissions are vented to a combustion device for 6 hours, then the daily average is the average of the temperature measurements taken during those 6 hours.

(ii) The operating day shall be the 24-hour period that the owner or operator specifies in the operating permit or the Notification of Compliance Status, for purposes of determining daily average values.

(6) If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day.

(7) Monitoring data recorded during periods identified in paragraphs (d)(7)(i) through (v) of this Condition shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or combustion, recovery, or recapture device operation when monitors are not operating.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(ii) Start-ups;

(iii) Shutdowns;

(iv) Malfunctions; or

(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(8) For continuous monitoring systems used to comply with this subpart, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(9) The owner or operator of an affected source granted a waiver of recordkeeping or reporting requirements under the General Provisions' recordkeeping and reporting requirements in §63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of recordkeeping or reporting requirements.

(e) *Reporting and notification.* In addition to the reports and notifications required by 40 CFR part 63, subpart A, as specified in this subpart, the owner or operator of an affected source shall prepare and submit the reports listed in paragraphs (e)(3) through (8) of 40CFR§63.1439, as applicable. All reports required by this subpart, and the schedule for their submittal, are listed in Table 8 of this subpart.

(1) *Violation of reporting requirements.* Owners and operators shall not be in violation of the reporting requirements of this paragraph (e) for failing to submit information required to be included in a specified report if the owner or operator meets the requirements in paragraphs (e)(1)(i) through (iii) of this Condition. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of this subpart, or changes in methods or equipment for monitoring, recordkeeping, or reporting.

(i) The information was not known in time for inclusion in the report specified by this subpart.

(ii) The owner or operator has been diligent in obtaining the information.

(iii) The owner or operator submits a report according to the provisions of paragraphs (e)(1)(iii)(A) through (C) of this Condition.

(A) If this subpart expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in this subpart.

(B) If this subpart does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to the State operating permit programs in part 70 or the Federal operating permit programs in part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit.

(C) In any case not addressed by paragraph (e)(1)(iii)(A) or (B) of this Condition, the owner or operator shall submit the information with the first Periodic Report, as required by this subpart, which has a submission deadline at least 60 days after the information is obtained.

(2) *Submittal of reports.* All reports required under this subpart shall be sent to the Administrator at the applicable address listed in the General Provisions' list of addresses of State air pollution control agencies and EPA Regional Offices, in §63.13. If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(5) *Notification of Compliance Status.*

(ii) For each monitored parameter for which a maximum or minimum level is required to be established under the HON process vent monitoring requirements in §63.114(e) and the process vent monitoring requirements in §63.1429(d), the information specified in paragraphs (e)(5)(ii)(A) through (C) of 40CFR§63.1439 shall be submitted.

(6) *Periodic Reports.* For existing and new affected sources, the owner or operator shall submit Periodic Reports as specified in paragraphs (e)(6)(i) through (viii) of this Condition. In

addition, for equipment leaks subject to §63.1434, the owner or operator shall submit the information specified in the HON periodic reporting requirements in §63.182(d), and for heat exchange systems subject to §63.1434, the owner or operator shall submit the information specified in the HON heat exchange system reporting requirements in §63.104(f)(2), as part of the Periodic Report required by this paragraph (e)(6).

(i) Except as specified in paragraphs (e)(6)(viii) of this Condition, a report containing the information in paragraph (e)(6)(ii) of this Condition or paragraphs (e)(6)(iii) through (vii) of this Condition, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180-day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(ii) If none of the compliance exceptions in paragraphs (e)(6)(iii) through (vii) of this Condition occurred during the 6-month period, the Periodic Report required by paragraph (e)(6)(i) of this Condition shall be a statement that there were no compliance exceptions, as described in this paragraph, for the 6-month period covered by that report and that none of the activities specified in paragraphs (e)(6)(iii) through (vii) of this Condition occurred during the period covered by that report.

(iii) For an owner or operator of an affected source complying with the provisions of §§63.1432 through 63.1433 for any emission point, Periodic Reports shall include:

(B) The daily average values of monitored parameters for all excursions, as defined in §63.1438(f).

(C) The periods when monitoring data were not collected shall be specified; and

(D) The information in paragraphs (e)(6)(iii)(D)(*1*) through (*3*) of this Condition, as applicable:

(*1*) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time.

(*2*) Notification if one or more emission points (other than equipment leak components subject to §63.1434), or one or more PMPU is added to an affected source. The owner or operator shall submit the information contained in paragraphs (e)(6)(iii)(D)(*2*)(i) and (*ii*) of this Condition.

(*i*) A description of the addition to the affected source.

(*ii*) Notification of the group status or control requirement for the additional emission point or all emission points in the PMPU.

(*3*) For process wastewater streams sent for treatment pursuant to §63.132(g), reports of changes in the identity of the treatment facility or transferee.

(E) The information in paragraph (b)(1)(ii) of this Condition for reports of start-up, shutdown, and malfunction.

(iv) If any performance tests are reported in a Periodic Report, the following information shall be included:

(A) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of 40CFR§63.1439.

(B) For additional tests performed for the same kind of emission point using the

same method, results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(v) The results for each change made to a primary product determination for a PMPU made under §63.1420(e)(3) or (10).

(vi) The results for each reevaluation of the applicability of this subpart to a storage vessel that begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or a storage vessel that ceases to receive material from (or send material to) a process unit that was included in the initial determination, in accordance with §63.1420(f)(8).

(vii) The Periodic Report required by the equipment leak provisions in §63.1434(f) shall be submitted as part of the Periodic Report required by paragraph (e)(6) of this Condition.

(viii) The owner or operator of an affected source shall submit quarterly reports for particular emission points and process Conditions as specified in paragraphs (e)(6)(viii)(A) through (D) of this Condition.

(A) The owner or operator of an affected source shall submit quarterly reports for a period of 1 year for an emission point or process Condition if the emission point or process Condition meets the conditions in paragraph (e)(6)(viii)(A)(*1*) or (*2*) of this Condition.

(*1*) A combustion, recovery, or recapture device for a particular emission point or process section has more excursions, as defined in §63.1438(f), than the number of excused excursions allowed under §63.1438(g) for a semiannual reporting period; or

(*2*) The Administrator requests the owner or operator to submit quarterly reports for that emission point or process section.

(B) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (vii) of this Condition, as applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(viii)(A) of this Condition. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of this Condition.

(C) Quarterly reports shall be submitted no later than 60 days after the end of each quarter.

(D) After quarterly reports have been submitted for an emission point for 1 year without more excursions occurring (during that year) than the number of excused excursions allowed under §63.1438(g), the owner or operator may return to semiannual reporting for the emission point or process section.

(7) *Other reports.* Other reports shall be submitted as specified in paragraphs (e)(7)(ii) through (iii) of this Condition.

(ii) When the conditions at §63.1420(e)(3)(iii), (e)(9), or (e)(10) are met, reports of changes to the primary product for a PMPU or process unit, as required by §63.1420(e)(3)(iii), (e)(9), or (e)(10)(iii), respectively, shall be submitted.

(iii) Owners or operators of PMPU or emission points (other than equipment leak components subject to §63.1434) that are subject to provisions for changes or additions to plant sites in §63.1420(g)(1) or (2) shall submit a report as specified in paragraphs (e)(7)(iii)(A) and (B) of this Condition.

(A) Reports shall include:

(*1*) A description of the process change or addition, as appropriate;

(*2*) The planned start-up date and the appropriate compliance date, according to §63.1420(g)(1) or (2); and

(*3*) Identification of the group status of emission points (except equipment leak components subject to the requirements in §63.1434) specified in paragraphs (e)(7)(iii)(A)(*3*)(*i*) through (*iii*) of this Condition, as applicable.

(*i*) All the emission points in the added PMPU, as described in §63.1420(g)(1).

(*ii*) All the emission points in an affected source designated as a new affected source under §63.1420(g)(2)(i).

(*iii*) All the added or created emission points as described in §63.1420(g)(2)(ii) or (iii).

(B) Reports shall be submitted as specified in paragraphs (e)(7)(iii)(B)(*1*) through (*3*) of this Condition, as appropriate.

(*1*) Owners or operators of an added PMPU subject to §63.1420(g)(1) shall submit a report no later than 180 days prior to the compliance date for the PMPU.

(*2*) Owners or operators of an affected source designated as a new affected source under §63.1420(g)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(*3*) Owners and operators of any emission point (other than equipment leak components subject to §63.1434) subject to §63.1420(g)(2)(ii) or (iii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(h) *Reduced recordkeeping program.* For any parameter with respect to any item of equipment, the owner or operator may implement the recordkeeping requirements in paragraph (h)(1) or (2) of this Condition as alternatives to the continuous operating parameter monitoring and recordkeeping provisions that would otherwise apply under this subpart. The owner or operator shall retain for a period of 5 years each record required by paragraph (h)(1) or (2) of this Condition.

(1) The owner or operator may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of paragraphs (h)(1)(i) through (iv) of this Condition are met. An owner or operator electing to comply with the requirements of paragraph (h)(1) of this Condition shall notify the Administrator in the Notification of Compliance Status or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of paragraph (h)(1) of this Condition.

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than start-ups, shutdowns or malfunctions (e.g., a temperature reading of −-200 °C on a boiler), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in paragraphs (h)(1)(ii)(A) through (C) of this Condition. All instances in an operating day constitute a single occurrence.

(A) The running average is above the maximum or below the minimum established limits;

(B) The running average is based on at least six 1-hour average values; and

(C) The running average reflects a period of operation other than a start-up, shutdown, or malfunction.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation other than start-ups, shutdowns or malfunctions, except in circumstances where the presence of unchanging data are the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(iv) The monitoring system will alert the owner or operator by an alarm or other means, if the running average parameter value calculated under paragraph (h)(1)(ii) of this Condition reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(v) The owner or operator shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of paragraph (h)(1) of this Condition, at the times specified in paragraphs (h)(1)(v)(A) through (C) of this Condition. The owner or operator shall document that the required verifications occurred.

(A) Upon initial installation.

(B) Annually after initial installation.

(C) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this Condition.

(vi) The owner or operator shall retain the records identified in paragraphs (h)(1)(vi)(A) through (D) of this Condition.

(A) Identification of each parameter, for each item of equipment, for which the owner or operator has elected to comply with the requirements of paragraph (h) of this Condition.

(B) A description of the applicable monitoring system(s), and how compliance will be achieved with each requirement of paragraphs (h)(1)(i) through (v) of this Condition. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the owner or operator shall retain both the current and the most recent superseded description, as specified in paragraph (h)(1)(vi)(D) of this Condition.

(C) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of paragraph (h)(1) of this Condition.

(D) The owner or operator subject to paragraph (h)(1)(vi)(B) of this Condition shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The owner or operator shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

(2) If an owner or operator has elected to implement the requirements of paragraph (h)(1) of this Condition for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this Condition, the owner or operator is no longer required to record the daily average value, for any operating day when the daily average is less than the maximum, or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator.

(i) If the owner or operator elects not to retain the daily average values, the owner or operator shall notify the Administrator in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(ii) If, on any operating day after the owner or operator has ceased recording daily average values as provided in paragraph (h)(2) of this Condition, there is an excursion as defined in paragraph (h)(2)(iv) of this Condition, the owner or operator shall immediately resume retaining the daily average value for each operating day

and shall notify the Administrator in the next Periodic Report. The owner or operator shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this Condition.

(iii) The owner or operator shall retain the records specified in paragraph (h)(1) of this Condition, for the duration specified in paragraph (h) of this Condition. For any calendar week, if compliance with paragraphs (h)(1)(i) through (iv) of this Condition does not result in retention of a record of at least one occurrence or measured parameter value, the owner or operator shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction.

(iv) For the purposes of paragraph (h) of this Condition, an excursion means that the daily average of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in paragraphs (h)(2)(iv)(A) and (B) of this Condition.

(A) The daily average value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of paragraph (h)(2) of this Condition, if the owner or operator follows the applicable provisions of the start-up, shutdown, and malfunction plan required by the General Provisions in §63.6(e)(3).

(B) An excused excursion, as described in §63.1438(g), shall not be considered an excursion for the purposes of paragraph (h)(2) of this Condition.

[45CSR13, Permit No. R13-2443 (Condition B.4.), 45CSR34, and 40 C.F.R. §63.1439]

7.4.5. All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other abnormal discharges of toxic air pollutants into the open air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculations using other process measurements.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-3.4 State-Enforceable only]

7.4.6. Written records shall be maintained that identify all pumps, compressors, pressure relief valves, valves, sampling connections, open-ended lines, and flanges of a chemical processing unit that are in toxic air pollutant service. These records shall record the results of all monitoring and inspections, emissions control measures applied and the nature, timing, and results of repair efforts.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-10.3 State-Enforceable only]

7.5. Reporting Requirements

7.5.1. The emission to the air of any toxic air pollutant resulting from an abnormal release or spill in excess of the following amounts shall be reported to the Director or his authorized representative not later than 24-hours after the chemical processing unit owner/operator has knowledge of such emission:

7.5.1.a. For ethylene oxide, and vinyl chloride, one (1) pound

7.5.1.b. For all other toxic air pollutants, fifty (50) pounds.

The owner or operator shall file a written report with the Director stating the details of all such incidents resulting in the emission of more than fifty (50) pounds of any toxic air pollutant within seven (7) days of the occurrence. The owner/operator shall submit to the Director, at his request, records of all abnormal toxic air pollutant discharges to the air.
[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-10.4 State-Enforceable only]

7.5.2. Any period of failure or inoperability of air pollution control equipment required by this rule shall be reported to the Director not later than 24-hours after the owner/operator has knowledge of such failure. Such reports shall be made in conjunction with necessary requests for variances as provided under 45CSR§27-12.

[45CSR13, Permit No. R13-2443 (Condition B.5.) and 45CSR§27-10.5 State-Enforceable only]

7.6. Compliance Plan

N/A

8.0 Texin

8.1. Limitations and Standards

8.1.1. The TEXIN production line #4 shall be comprised of only that equipment shown in Table 1 - Equipment List.

Table 1 - Equipment List

Source ID	Description	Pollution Control		Emission Point
		ID	Device	
022-1080	Additive Batch Tank	-	None	TX4-1
022-1082	Mixer	-	None	TX4-1
022-1083	Product Cure Oven	-	None	TX4-1
022-1076	Hold Tank	-	None	TX4-2
022-0118	Mix Tank	-	None	TX4-3
022-0831	Cyclone	022-0970	Baghouse	TX4-4

[45CSR13, Permit No. R13-2507 (Condition A.1.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

8.1.2. The TEXIN production line #4 shall be limited to a maximum operating schedule of 8,760 hours per year. **[45CSR13, Permit No. R13-2507 -(Condition A.2.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]**

8.1.3. The TEXIN production line #4 shall not exceed the maximum emission rates shown in Table 2 - Emission Limits.

Table 2 - Emission Limits

Emission Point	Pollutant	Emission Rate	
		Hourly (lbs/hr)	Annual (lbs/yr)
TX4-1	VOC	0.0006	5.3
TX4-2	VOC	0.0005	4.4
TX4-3	VOC	0.0005	4.4
TX4-4	PM	0.08	701

[45CSR13, Permit No. R13-2507 (Condition A.3.) Compliance with this limit assures compliance with 45CSR§7-4.1. (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

8.1.4. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures,

to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1. (022-1082, 022-1083, 022-0831)]

8.1.5. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2507 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-2507 (Condition C.3.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

8.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20%) percent opacity.
[45CSR§7-3.1. (022-0831, 022-0970)]

8.1.7. The provisions of 8.1.6 above shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40%) percent opacity for any period or periods aggregating no more than five (5) minutes in any (60)minute period.
[45CSR§7-3.2. (022-0831, 022-0970)]

8.1.8. The maximum HAP emissions shall not exceed 0.2 tons per year for Lines 1, 2 and 3 combined in any twelve rolling month period, calculated as shown in Condition 8.4.5.
[45CSR§30-12.7. (022-732, 022-813, 022-889, 022-841, 022-841b, 022-570, 022-814, 022-890)]

8.2. Monitoring Requirements

8.2.1. Quarterly visual emission checks of each emission point subject to an opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within twenty-four (24) hours. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
If visible emissions are identified from Method 22 at any test, the Permittee must complete six (6) consecutive months of no visible emissions detected before going to quarterly monitoring.
[45CSR§7A-2.1a,b (022-0831, 022-0970)]

8.2.2. The Permittee shall monitor the amount of Production Units produced in Lines #1, 2 and 3 on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

8.3. Testing Requirements

N/A

8.4. Recordkeeping Requirements

8.4.1. For the purpose of determining compliance with permit limits based on operating schedule and emission limits as described in Specific Requirements 8.1.2. and 8.1.3, the permittee shall maintain certified daily records of the hours of operation for the TEXIN production Line #4. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time in which the information is requested, all records shall be certified and signed by a "Responsible Official" prior to being submitted to the Director.
[45CSR13, Permit No. R13-2507 (Condition B.3.)]

8.4.2. For the purpose of determining compliance with the permit limits based on the emission limits of Emission Point TX4-4, as described in Condition 8.1.3, the permittee shall maintain certified daily records of the performance observations conducted on the TEXIN production Line #4 baghouse. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time in which the information is requested, all records shall be certified and signed by a "Responsible Official" prior to being submitted to the Director.
[45CSR13, Permit No. R13-2507 (Condition B.4.)]

8.4.3. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the following:
Storage vessels with a capacity greater than or equal to 40 cubic meters (m^3) that is used to store volatile organic liquids (VOL's) for which construction, reconstruction, or modification commenced after July 23, 1984.
[45CSR16, 40CFR§60.110b Subpart Kb. (023-502, 023-508)]

8.4.4. Records of the total amount of Texin produced by the individual extruders (022-570, 022-814, and 022-890) shall be maintained on a rolling 12-month basis.
[45CSR§30-5.1.c.]

8.4.5. HAP emissions from Lines #1, 2 and 3 shall be calculated using the following equation:

$$ET = \sum (U_i \times EF_i)$$

Where ET = Combined emissions of HAPs from Lines 1, 2, and 3 (lbs)
U_i = units produced in that line
EF_i = Emission factor for individual line (See Table 8.4.5)

Table 8.4.5

	Line #1	Line #2	Line #3
Emission Factor (EF_i)	0.0135 lbs HAPs/unit produced	0.0135 lbs HAPs/unit produced	0.0107 lbs HAPs/unit produced

[45CSR§30-5.1.c.]

8.5. Reporting Requirements

N/A

8.6. Compliance Plan

N/A

9.0 MPP

9.1. Limitations and Standards

9.1.1. To ensure compliance with the HAP PTE, the total amount of Production Units shall not exceed 1,030 per year on a rolling 12-month basis. HAP emissions shall be calculated as shown in Condition 9.4.2. **[45CSR§30-12.7. (PCV001.2)]**

9.2. Monitoring Requirements

9.2.1. The Permittee shall monitor the amount of Production Units produced on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

9.3. Testing Requirements

N/A

9.4. Recordkeeping Requirements

9.4.1. The Permittee shall maintain records of the Production Units produced in the MPP Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

9.4.2. HAP emissions from MPP (excluding fugitives) shall be calculated using the following equation:

$$ET = \sum (U \times EF)$$

Where ET =HAP emissions (lbs)
U = Production Units
EF = Emission factor for MPP (See Table 9.4.2)

Table 9.4.2

Emission Factor (EF)	0.067 lbs HAP/unit produced

[45CSR§30-5.1.c.]

9.5. Reporting Requirements

N/A

9.6. Compliance Plan

N/A

10.0 SPU

10.1. Limitations and Standards

10.1.1. The maximum HAP emissions shall not exceed 4.6 tons per year for the product groups shown in Table 10.4.1 in any twelve month rolling period, calculated as shown in Condition 10.4.1.
[45CSR§30-12.7. (026-092, 026-662, 026-762, 026-663, 026-644, 026-642, 026-524, 026-552, 026-653, 026-233, 026-654, 026-794, 026-522, 026-230, 026-645, 026-756, 026-752, 032-001, 032-006, 032-002, 032-003, 032-005, 032-030, 032-031, 032-539, 026-008, 026-592.1, 026-592.2, 026-548.1, 026-548.2, 026-548.3, 026-547.2, 026-541, 026-543, 026-545, 026-547.1, 026-807, 026-809, 026-811, 026-813, 026-814, 026-804, 026-589, 026-555, 026-533, 026-588)]

10.1.2. Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service except for manual operations that require access, such as material addition and removal, inspection, sampling, and cleaning.
[45CSR34 and 40CFR§63.11495(a)(1) (032-001 vent PV86, 032-002, vent 002)]

10.1.3. The Permittee must conduct inspections of process vessels and equipment for each CMPU in organic HAP service, as specified in paragraphs (i) through (v) of this Condition, to demonstrate compliance with Condition 10.1.2 and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service.

(i) Inspections must be conducted at least quarterly.

(ii) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

(iii) As an alternative to conducting inspections, as specified in paragraph (ii) of this Condition, you may use Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 ppmv to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with paragraph (ii) of this Condition are due to a condition other than loss of HAP.

(iv) Inspections must be conducted while the subject CMPU is operating.

(v) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.
[45CSR34 and 40CFR§63.11495(a)(3) (032-001 vent PV86, 032-002, vent 002)]

10.1.4. The Permittee shall repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this Condition, a leak will be considered "repaired" if a condition specified in paragraph (i), (ii), or (iii) of this Condition is met.

(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or

(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or

(iii) The system will hold a test pressure.
[45CSR34 and 40CFR§63.11495(a)(4) (032-001 vent PV86, 032-002, vent 002)]

10.1.5. The Permittee shall keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.
[45CSR34 and 40CFR§63.11495(a)(5) (032-001 vent PV86, 032-002, vent 002)]

10.2. Monitoring Requirements

10.2.1. The Permittee shall monitor the amount of Production Units produced for the product groups listed in Table 10.4.1 on a monthly basis.
[45CSR§30-5.1.c.]

10.2.2. A routine program shall be established and performed to ensure the minimization of fugitive emissions. This program shall include:
a) A minimum of weekly walk-throughs to examine equipment for leaks using visual and olfactory means.
b) The documentation of any equipment leaks.
c) Prompt isolation or repair of any leaks.
[45CSR§30-5.1.c.]

10.2.3. The Permittee shall monitor the amount of xylene and phthallic anhydride transferred on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

N/A

10.4. Recordkeeping Requirements

10.4.1. HAP emissions from the product groups listed below shall be calculated using the following equation:

$$ET = \sum (U_i \times EF_i)$$

Where ET = Combined emissions of HAPs (lbs) from all product groups
U_i = units produced from each product group
EF_i = Emission factor for the particular product group (See Table 10.4.1)

Table 10.4.1

Product Group	EF (lbs HAPs/unit produced)
Aloph	0.0007
Prepols 1	0.000125
Prepols 2	0.482
Prepols 3	7.5718
Isobl 1	0.029

Isobl 2	0.0001
PHD	0.030
Polyester 1	0.712442
Polyester 2	6.386307
Polyester 3	33.690
Polyester 4	3.776645

[45CSR§30-5.1.c.]

10.4.2. The Permittee shall maintain records of the Production Units produced in the SPU Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

10.4.3. The Permittee shall maintain monthly records of the walk-throughs to examine equipment for leaks.
[45CSR§30-5.1.c.]

10.4.4. The Permittee shall maintain records of the xylene and phthallic anhydride transferred on a rolling 12-month basis.
[45CSR§30-5.1.c.]

10.5. Reporting Requirements

10.5.1. Semiannual Compliance Reports. You must submit semiannual compliance reports that contain the information specified in paragraphs (1) through (7) of this Condition, as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in paragraphs (1) through (8) of 40CFR§63.11501(d).

(1) Deviations. You must clearly identify any deviation from the requirements of 40CFR63, Subpart VVVVVV.

(2) Delay of repair for a large heat exchange system. You must include the information specified in 40CFR§63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min.

(3) Delay of leak repair. You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.

(4) Process change. You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in 40CFR§63.11501(b).

(5) Data for the alternative standard. If you comply with the alternative standard, as specified in 40CFR63, Subpart VVVVV Table 2 or 3 to this subpart, report the information required in 40CFR§63.1258(b)(5).

(6) Overlapping rule requirements. Report any changes in the overlapping provisions with which you comply.

(7) Reactive and resinous materials. Report any transfer of liquids that are reactive or resinous materials, as defined in 40CFR§63.11502(b), and not included in the NOCS.
[45CSR34 and 40CFR§63.11501(d) (032-001 vent PV86, 032-002, vent 002)]

10.6. Compliance Plan

N/A

11.0 Material Handling Department

11.1. Limitations and Standards

11.1.1. Tank 558 and Tank 559 shall not exceed a total combined maximum annual throughput of 10,000,000 gallons per year.
[45CSR13, R13-1409 – (Condition 4.1.1.)]

11.1.2. Loading Rack 05L shall not exceed a maximum annual throughput of 10,000,000 gallons per year.
[45CSR13, R13-1409 – (Condition 4.1.2.)]

11.1.3. All displaced vapors released from Tank 558, Tank 559, and Loading Rack 05L shall be directed through and controlled by the carbon adsorption units.
[45CSR13, R13-1409 – (Condition 4.1.3.)]

11.1.4. Emissions released from the permitted sources identified in Table 11.1.4.a of this permit shall be limited to the pollutants and associated emission rates shown in Table 11.1.4.b of this permit.

Table 11.1.4.a.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Tank 558	CA24	TD Tank	1991	40,000 gal	Carbon Adsorption
Tank 559	CA25	TDS Tank	1991	40,000 gal	Carbon Adsorption
05L Loading Rack	CA26	TD/TDS Loading	1991	N/A	Carbon Adsorption
	CA27	Benzoyl Chloride Injection System	1991	N/A	Carbon Adsorption

Table 11.1.4.b.

Emission Point ID	VOC		HAP[1]	
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
CA24	0.1	0.01	0.1	0.01
CA25	0.1	0.01	0.1	0.01
CA26	0.1	0.01	0.1	0.01
CA27	0.1	0.01	--	--

1 - HAP emissions shall be limited to toluene diisocyanate (TDI).

[45CSR13, R13-1409 – (Condition 4.1.4.)]

11.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45CSR§13-5.11; 45CSR13, R13-1409 – (Condition 4.1.7.)]**

11.2. Monitoring Requirements

11.2.1. For the purpose of determining compliance with the limits set forth in Conditions 11.1.1, 11.1.2, and 11.1.4 of this permit, the permittee shall monitor the monthly material throughput of Tanks 558 and 559, and Loading Rack 05L.
[45CSR13, R13-1409 - (Condition 4.2.1.)]

11.2.2. For the purpose of determining compliance with the limits set forth in 11.1.3, the permittee shall conduct routine monitoring of the adsorption units on a quarterly basis. When breakthrough is determined, the subject carbon adsorption unit shall be replaced.
[45CSR13, R13-1409 - (Condition 4.2.2.)]

11.3. Testing Requirements

N/A

11.4. Recordkeeping Requirements

11.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.
[45CSR13, R13-1409 - (Condition 4.4.1.)]

11.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-1409 - (Condition 4.4.2.)]

11.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1409 - (Condition 4.4.3.)]

11.4.4. For the purpose of demonstrating compliance with the recordkeeping requirements set forth in Condition 11.2.1 of this permit, the permittee shall maintain monthly throughput records associated with the operation of Tanks 558 and 559, and Loading Rack 05L.
[45CSR13, R13-1409 - (Condition 4.4.4.)]

11.4.5. For the purpose of demonstrating compliance with the recordkeeping requirements set forth in Condition 11.2.2 of this permit, the permittee shall maintain quarterly records of the inspection and maintenance activities associated with the carbon adsorption units.
[45CSR13, R13-1409 - (Condition 4.4.5.)]

11.4.6. For Tanks 558 and 559, the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be maintained for the life of the source.
[45CSR16; 40CFR§§60.116b(a) and (b); 45CSR13, R13-1409 – (Condition 4.4.6.)]

11.4.7. For Tanks 558 and 559, the permittee shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. **[45CSR16; 40 CFR§60.116b(c); 45CSR13, R13-1409 – (Condition 4.4.6.)]**

11.4.8. Compliance with all hourly emission limits set forth by Condition 11.1.4 of this permit shall be determined by using a monthly averaged hourly rate. A monthly averaged hourly rate shall be based on the total monthly sum of emissions divided by the total hours of operation for the month during the monitoring period. Compliance with all annual emission limits set forth by Condition 11.1.4 of this permit shall be determined by using a 12-month rolling total. A 12-month rolling total shall mean the sum of emissions at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-1409 - (Condition 4.4.7.)]

11.4.9. The permittee shall maintain records of all information required by Section 11 (including monitoring data, support information, reports, and notification), recorded in a form suitable and readily available for expeditious inspection and review. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on-site. The remaining three (3) years of data

may be maintained off-site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically, on microfilm, or on microfiche.

Certified copies of these records shall be made available to the Director of the Division of Air Quality or his duly authorized representative upon request. At a time prior to submittal to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the Certification of Data Accuracy statement provided in Appendix C. If these records are considered to contain confidential business information as identified in the permit application, the records may be submitted according to the procedures set forth in 45CSR31 – "Confidential Information."
[45CSR13, R13-1409 (Condition 4.4.8.)]

11.5. Reporting Requirements

N/A

11.6. Compliance Plan

N/A

APPENDIX A

45CSR2 Monitoring Plan

45 CSR 2
Registration, Monitoring and Recordkeeping Plan

Bayer Corporation
New Martinsville

Facility Information:

Facility Name: Bayer MaterialScience LLC

Facility Address: Rt 2, Box 500
New Martinsville, WV 26155

Facility Environmental Contact: M. A. Henderson

Bayer, New Martinsville is a chemical manufacturing facility with the following Type 'b' combustion units discharging through individual stacks.

TABLE 1A

Unit ID	DHI (mmBTU/hr)	Fuel Source
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste
Sum of DHI for all units	555.4	

All fuel burning units are Type 'b' fuel burning units as defined in 45 CSR 2 – 2.10.b.

§45-2A-3. APPLICABILITY

§45-2A-3.1 This rule applies to any fuel burning unit(s) having a design heat input (DHI) over ten (10) million BTU/hr.

Based on this applicability, the following units are exempt from the rule.

TABLE 2A

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45-2A-3.1.a. The owner or operator of a fuel burning unit(s) which combusts only natural gas shall be exempt from sections 5 and 6.
§45-2A-3.1.b. The owner or operator of a fuel burning unit(s) with a DHI of less than 100 mmBTU/hr shall be exempt from the periodic testing requirements of section 5, and the monitoring requirements of section 6.

Based on this applicability, the following units are exempt from the testing and monitoring requirements of the rule.

TABLE 3A

Unit ID	DHI (mmBTU/hr)	Fuel Source
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste

§45–2A-4. REGISTRATION

§45-2A-4.1. The owner or operator shall conduct periodic simultaneous weight emission tests of all similar fuel burning units at each source, except where the owner or operator registers allowable emission rates for individual stacks in accordance with subsection 4.2 of this rule.
§45-2A-4.2. In accordance with subsection 4.2 of 45CSR2, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B.

It is Bayer's understanding that many of the fuel burning units located at this facility are exempt from testing and monitoring. However, the fuel burning units are still subject to the registration requirements of §45-2A-4 which requires periodic simultaneous weight emission testing (§45-2A-4.1.) or the owner or operator registers allowable emission rates for individual stacks in accordance with subsection 4.2, in pounds per hour, determined as provided in App. B.

In accordance with §45-2A-4.2. attached is the registration of the allowable particulate emission rates for each individual stack in pounds per hour as determined by Appendix B. Please note that the original registration was submitted and approved in 2001

§45–2A-4. REGISTRATION

Appendix B Registration

Table 1 - Sum of Design Heat Inputs for Similar Units					
Type 'a'		Type 'b'		Type 'c'	
(A) Unit ID	(B) DHI (mmBTU/hr)	(C) Unit ID	(D) DHI (mmBTU /hr)	(E) Unit ID	(F) DHI (mmBTU/hr)
		Boiler #9 (022)	246.1		
		Boiler #10 (22A)	171.3		
		Boiler #11	98		
		Fluid Bed Incinerator #4	40		
Sum of DHI for all Type 'a' units	0	Sum of DHI for all Type 'a' units	**555.4**	Sum of DHI for all Type 'a' units	0

Table 2 – Weight Emission Limits for Similar Units			
(A)	(B) Total Design Heat Input (mmBTU/hr)	(C) Factor from 45CSR2, Subsection 4.1 (lb/mmBTU)	(D) Weight Emission Rate (lb/hr)1,2
Sum of DHI for all Type 'a' units		0.05	
Sum of DHI for all Type 'b' units	555.4	0.09	50.0
Sum of DHI for all Type 'c' units		N/A, look up lb/hr limit 45CSR2, Table 45-2	

§45-2A-4. REGISTRATION

Table 3 – Registration of Standard Individual Stack Emission Rates

(A) Stack ID	(B) Sum of DHI for all units venting thru stack (mmBTU/hr)	(C) Sum of DHI for all Similar Units (Table 2, Column B (mmBTU/hr)	(D) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)	(E) Stack Emission Rate (lb/hr) [(B/C)*D=E]
Boiler #9 (022)	246.1	852	76.7	22.2
Boiler #10 (22A)	171.3	852	76.7	15.4
Boiler #11	98	852	76.7	8.8
Fluid Bed Incinerator #4	40	852	76.7	3.6
Stack Allowable Emission Rate (lb/hr)				50

§45–2A-5 Testing Requirements & §45–2A-6 Monitoring Plan Requirements

It is Bayers understanding that all fuel burning units that do not meet the criteria of applicability in §45-2A-3 are either exempt from the rule (§45-2A-3.1.) or exempt from the testing and monitoring requirements of sections 5 and 6 (§45-2A-3.1.a., §45-2A-3.1.b.). The fuel burning units that are exempt from the requirements of §45-2A-5 and §45-2A-6 are listed in Table 2A and Table 3A.

The only fuel burning units subject to the requirements of §45-2A-5 and §45-2A-6 are listed in the following Table 4A.

TABLE 4A

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45–2A-5 Testing Requirements & §45–2A-6 Monitoring Plan Requirements

Visible Emission Testing and Monitoring Plan

§45-2A-5.1.a. The owner or operator shall periodically conduct or have conducted, visible emission tests to determine the compliance of each stack with the visible emission standard set forth in section 3 of 45CSR2.

§45 CSR 2, 3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

There is no fuel oil used in the boilers.

§45–2A-5 Testing Requirements & §45–2A-6 Monitoring Plan Requirements

Weight Emission Testing and Monitoring Plan

§45-2A-5.2.a. The owner or operator shall periodically conduct or have conducted, weight emission tests to determine the compliance of each fuel stack with the weight emission standards set forth in section 4 of 45CSR2.

Fuel oil is no longer used in the boilers

§45-2A-7 Recordkeeping and Reporting Requirements

§45-2A-7.1.a. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as specified in paragraphs 7.1.a.1 through 7.1.a.6, as applicable.

The following units will maintain records in accordance to 7.1.a.1. through 7.1.b. as it pertains to the fuel source utilized by that unit.

Table 5A

Unit ID	DHI (mmBTU/hr)	Fuel Source
Boiler #9 (022)	246.1	Natural Gas,
Boiler #10 (22A)	171.3	Natural Gas,
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste

§45-2A-7 Recordkeeping and Reporting Requirements

7.1.a.1. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis.

7.1.a.2. For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.

7.1.a.5. For fuel burning unit(s) which burn an alternate fuel(s), such records shall include, but not be limited to, the date and time of start-up and shutdown, and fuel quality analysis as approved by the Director.

7.1.a.6. For fuel burning unit(s) which burn a combination of fuels, the owner or operator shall comply with the applicable recordkeeping requirements of paragraph 7.1.a.1 through paragraph 7.1.a.5. for each fuel burned.

7.1.b. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

§45-2A-7 Recordkeeping and Reporting Requirements

Quarterly ***Monitoring Summary Reports*** will be maintained onsite in the attached format for each applicable unit and fuel source. Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7.2.c. through §45-2A-7.2.d.

§45-2A-7 Non-COMS Monitoring Summary Report

Bayer Corporation
New Martinsville, WV

Quarterly Monitoring Period Starting:_____
Quarterly Monitoring Period Ending: _____

Natural Gas

Unit	Start up / Shut Down Dates and Times	Monthly Quantity of Fuel Consumed

Distillate Oil

Unit	Start up / Shut Down Dates and Times	Monthly Quantity of Fuel Consumed

§45-2A-7 Recordkeeping and Reporting Requirements

7.2. Exception Reporting.

Exception reporting with respect to weight emission testing will comply with the requirements of reporting and testing under the Appendix of 45CSR2.

§45-2A-7.2.a. With respect to excursions associated with measured emissions under Section 4 of 45CSR2, compliance with the reporting and testing requirements under the Appendix to 45CSR2 shall fulfill the requirement for a periodic exception report under subdivision 8.3.b of 45CSR2.

Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7.2.c. *through* §45-2A-7.2.d.

7.2.c. Non-COMS Based Monitoring - Each owner or operator employing non-COMS based monitoring shall submit a "Monitoring Summary Report" and/or an "Excursion and Monitoring Plan Performance Report" to the Director on a semi-annual basis as part of the Title V Compliance Monitoring report.; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). The Monitoring Summary Report shall be in a format approved by the Director.

7.2.c.1. If the total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report shall be submitted to the Director; the Excursion and Monitoring System Performance report shall be maintained on-site and shall be submitted to the Director upon request.

7.2.c.2. If the number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report and the Excursion and Monitoring Plan Performance Report shall both be submitted to the Director.

§45-2A-7 Recordkeeping and Reporting Requirements

7.2.c.3. The Excursion and Monitoring Plan Performance Report shall be in a format approved by the Director and shall include, but not be limited to, the following information:

7.2.c.3.a. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion;

7.2.c.3.b. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility;

7.2.c.3.c. The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any);

7.2.c.3.d. The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken; and

7.2.c.3.e. When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report.

7.2.d. To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45CSR2 shall be followed.

§45-2A-7 Recordkeeping and Reporting Requirements

Non-COMS ***Excursion and Monitoring Plan Performance Reports*** will be maintained onsite in the attached format for each excursion. Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7.2.c. through §45-2A-7.2.d.

§45-2A-7 Excursion and Monitoring Plan Performance Report

Bayer Corporation
New Martinsville, WV

Unit:	
Date of Excursion:	
Start Time of Excursion:	
End Time of Excursion:	
Magnitude of Excursion (Opacity Readings):	
Identify if excursion occurred during:	
Startup:	
Shutdown:	
Malfunction:	
Identify the nature and cause of the excursion and any preventative measures adopted:	
Identify any periods of time when data is not available, reason for unavailability and corrective action:	

When no excursions have occurred - state it in the report!
When there are no periods of data availability - state it in the report!

APPENDIX B

45CSR10 Monitoring Plan

45 CSR 10
Registration, Monitoring and Recordkeeping Plan

Bayer MaterialScience, LLC
New Martinsville

Facility Information:

Facility Name: Bayer MaterialScience

Facility Address: Rt.2, Box 500
New Martinsville, WV 26155

Facility Environmental Contact: M. A. Henderson

Bayer, New Martinsville is a chemical manufacturing facility with the following Type 'b' combustion units discharging through individual stacks.

TABLE 1

Unit ID	DHI (mmBTU/hr)	Fuel Source
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste
Sum of DHI for all units	555.4	

All fuel burning units are Type 'b' fuel burning units as defined in 45 CSR 10 – 2.8.b.

§45 -10A-3. APPLICABILITY

§45 CSR10 3.1.a. Fuel burning unit(s) having a design heat input (DHI) less than ten (10) million BTU/hr are exempt.

Based on this applicability, the following units are exempt from the rule.

TABLE 2

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45 CSR10 3.1.b Fuel burning unit(s) which combusts only natural gas, wood or distillate oil alone or in combination are exempt.

Based on this applicability, the following units are exempt from the rule.

TABLE 3

Unit ID	DHI (mmBTU/hr)	Fuel Source
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas

§45–10A-4. REGISTRATION

§45–10A-4 Registration of Allowable Emission Rates for Individual Stacks.

In accordance with §45–10A-4.1 the following stacks are required to be registered.

TABLE 5

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45–10A-4. REGISTRATION

§45 –10A-4.1 In accordance with subsection 3.4.a. of 45CSR10, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B, except where:
§45 –10A-4.1.b The Director has approved a petition for an alternative individual stack allowable emission rate.

In January 2000 Bayer signed Consent Order # CO-SIP-2000-2. Bayer understands that the S02 limits as agreed to in the consent order constitute an alternative individual stack allowable emission rate as stated in §45 –10A-4.1.b.

Consent Order # CO-SIP-2000-2 Section IV. COMPLIANCE PROGRAM states the following as it pertains to Boiler #9 (022), Boiler #10 (22A) and the Solids Incinerator #1:

1. The Company agrees that it shall not operate any source of SO_2 emissions unless such source is in compliance with the Code, terms of this consent order, and any additional or more stringent SO_2 provisions of 45 CSR 10.

2. The Company agrees that at all times, including periods of source start-up, shut down, and malfunction, that it will, to the extent possible, maintain and operate all sources of SO_2 emissions, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing such emissions.

3. Upon the effective date of this Consent Order, the Company agrees to comply with the following emission and operational limitations:

   C. SO_2 emissions from Boiler Number 9 and Boiler Number 10 shall not exceed 86 lbs./hour and 62.5 lbs./hour respectively.

      a. Sulfur content of the fuel oil burned in Boilers Number 9 and 10 shall not exceed 0.72%.

      b. Total combined fuel oil burn rate to Boilers Number 9 and 10 shall not exceed 22 gallons per minute.

   D. SO_2 emissions from Incinerator #1, Solids Incinerator, shall not exceed 9.5 lbs./hour. The unit's burners shall only fire natural gas. The unit shall only incinerate non-hazardous plant waste.

§45–10A-4. REGISTRATION

Attached is the "Registration of Alternative Stack Emission Rates" table and all other Appendix B tables which demonstrate the increased level of compliance that Consent Order # CO-SIP-2000-2 carries.

APPENDIX B REGISTRATION

Registration of Alternative Stack Emission Rates		
(A) Stack ID	(B) Identify each unit venting through stack	(C) Alternative Stack Emission Rate (lb/hr)
None		
Sum of Alternative Stack Emission Rates (lb/hr)		

Sum of Design Heat Inputs for Similar Units					
Type 'a'		Type 'b'		Type 'c'	
(A) Unit ID	(B) DHI (mmBTU/hr)	(C) Unit ID	(D) DHI (mmBTU/hr)	(E) Unit ID	(F) DHI (mmBTU/hr)
Sum of DHI for all Type 'a' units	0	Sum of DHI for all Type 'b' units		Sum of DHI for all Type 'c' units	0

§45–10A-4. REGISTRATION

Weight Emission Limits for Similar Units			
(A)	(B)	(C)	(D)
	Total Design Heat Input (mmBTU/hr)	Factor from 45CSR10, Section 3 (lb/mmBTU)	Weight Emission Rate (lb/hr) [B * C = D]
Sum of DHI for all Type 'a' units	0		0
Type 'b' units	0		0
Sum of DHI for all Type 'c' units	0		0

Registration of Standard Individual Stack Emission Rates					
(A) Stack ID	(B) Identify each unit venting through stack	(C) Sum of DHI for all units venting through stack (mmBTU/hr)	(D) Sum of DHI for all similar units (mmBTU/hr)	(E) Wt. Emission rate for all similar units (lb/hr)	(F) Stack Emission Rate (lb/hr)
None					
Stack Allowable Emission Rate (lb/hr)					

§45–10A-4. REGISTRATION

§45 –10A-4.1. In accordance with subsection 3.4.a. of 45CSR10, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B, except where:
§45 –10A-4.1.a The owner or operator of a fuel burning unit utilizes CEMS or daily ASTM method sampling and analysis to demonstrate compliance with the plant-wide emission limit and the provisions of subdivision 3.4.a of 45 CSR10.

Permit R13-842 was issued to Bayer for a fluidized bed incineration system on December 9, 1986. The permit was revised on February 8, 1995 to replace a laboratory test method for S02 with a continuous S02 analyzer. In accordance with §45–10A-4.1.a., the following stack utilizes a CEM to demonstrate compliance for S02 emissions.

Table 6

Unit ID	DHI (mmBTU/hr)	Weight Emission Rate (R13-842) (lbs/hr)
Fluid Bed Incinerator	40	12.3

In January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. The limits agreed to in the consent order, exceed the requirements from the original Permit R13-842 and further demonstrate Bayer's commitment to meet or exceed any requirements set forth in 45CSR10A.

Table 7

Unit ID	DHI (mmBTU/hr)	Weight Emission Rate (R13-842) (lbs/hr)
Fluid Bed Incinerator	40	7.1

Consent Order # CO-SIP-2000-2 Section IV. COMPLIANCE PROGRAM states the following as it pertains to the Fluid Bed Incinerator.

3. Upon the effective date of this Consent Order, the Company agrees to comply with the following emission and operational limitations:

   E. SO_2 emissions from Incinerator #4, Fluidized Bed Incinerator shall not exceed 7.1 lbs./hour and 28.4 tons per year.

§45–10A-5 Testing Requirements & §45–10A-6 Monitoring Plan Requirements

§45–10A-5.1.c. The owner or operator of a fuel burning unit may petition for alternatives to the testing requirements of subsection 5.1 for units that are infrequently used or for infrequently used fuels.

§45–10A-5 Testing Requirements & §45–10A-6 Monitoring Plan Requirements

§45–10A-5.4. The owner or operator of a fuel burning unit employing CEMS to meet the requirements of section 6 shall be exempt from the testing requirements of subsections 5.1,5.2, and 5.3.

B. Fluid Bed Incinerator

In January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. Section V. COMPLIANCE TESTING AND MONITORING REQUIREMENTS states the following as it pertains to the Fluid Bed Incinerator.

5. Compliance with the sulfur dioxide emissions limits established in Section IV.3.E. Fluidized Bed Incinerator, shall be demonstrated by a Continuous Emission Monitoring (CEM) program as required by R13-842.

§45–10A-7 Recordkeeping and Reporting Requirements

A. Boiler #9 (022), Boiler #10 (22A), Solids Incinerator #1
B. Fluid Bed Incinerator #4

In accordance with the RECORDKEEPING, NOTICES AND REPORTING Requirements of CO-SIP-2000-2. Section VI., Bayer Corporation will submit quarterly analyzer summary reports for sulfur dioxide per Conditions B.7 and B.8 of Permit R13-842 (as modified February 8, 1995), for the Fluidized Bed Incinerator. This will be completed in accordance with 40 CFR 60.7. Also included will be a description of any changes made since the last quarter in the continuous emissions monitoring system process or controls. This report will be due no later than fifteen (15) days following the end of the previous quarter.

Also, in January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. Section VI. RECORDKEEPING, NOTICES AND REPORTING which states the following as it pertains to Boiler #9 (022), Boiler #10 (22A), Solids Incinerator #1 and the Fluid Bed Incinerator.

1. When demonstrating compliance using a reference test method under 40 CFR part 60, Appendix A, the Company shall be required to submit a test protocol to the Director for approval at least thirty (30) days prior to the projected test dates. The Director shall be provided written notice of the actual test dates after approval of the test protocol, but not less than fifteen (15) days prior to the first date of testing.

2. The Company shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of sources subject to this Consent Order, any malfunction of air pollution control equipment or any periods during which a control device was inoperative.

3. The Company shall report to the Director, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO_2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Company shall file a written report concerning the malfunction with the Director within ten (10) days, providing the following information:

   A. A detailed explanation of the factors involved or causes of the malfunction;

   B. The date and time of duration (with starting and ending times) of the period of excess emissions;

   C. An estimate of the total amount of excess emissions discharged during the malfunction period;

D. The maximum emission rate determined during the malfunction in units of the applicable emissions standard;

E. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction and;

F. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

4. All data and information required to be recorded or obtained under the terms of this Consent Order shall be maintained in a permanent form suitable for inspection and shall be retained for at least five (5) years following the date of the record or report. All such data and information shall be submitted in accordance with the terms of this Consent Order or made available to the Director upon his or her request or during any facility inspection by an authorized representative of the Director.

5. All reports required to be submitted to the Director under the terms of this Consent Order shall be certified by a responsible official of the Company. This certification shall state that, based on information and belief formed by reasonable inquiry, the statements and information in the document are true, accurate and complete.

Appendix C

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

SABIC

54-107-00010

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RECEIVED
AUG 18 2015
WV DEP / DIV OF AIR QUALITY

سابك
sabic

August 13, 2015

Associate Director, Office of Enforcement and Permits Review
(3AP12)
United States Environmental Protection Agency - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

William F. Durham
Director, Division of Air Quality
West Virginia Department of Environmental Protection
601 – 57th Street, SE
Charleston, WV 25304

Re: **SABIC INNOVATIVE PLASTICS US LLC – Washington, WV**
Facility ID R30-10700010
NOTICE OF FACILITY CLOSURE, SURRENDER OF TITLE V PERMIT, and SURRENDER OF WV R13 PERMITS

Dear Mr. Durham:

By this letter, SABIC Innovative Plastics US LLC ("SABIC"), the owner and operator of the above-referenced facility, hereby surrenders its Title V permit (number R30-10700010-2012; issued 6/6/2012; last modified 2/4/2014), effective as of the date of this letter (August 13, 2015).

Effective May 4, 2015, SABIC discontinued all manufacturing operations at its Washington, WV facility. Therefore, the site no longer meets the definition of a "major source" in 45 CSR 30.

By separate letters of this same date, SABIC is submitting all remaining reports (CAM report for the first half of 2015; semiannual reports for the first half and second half of 2015; and the annual compliance certification for RY2015) required by its Title V permit. The submission of these reports discharges all of SABIC's remaining reporting obligations under the Title V permit.

SABIC considers this surrender of its Title V permit to completely and irrevocably terminate the permit and its authority to operate the emission units subject to the permit. All of the emission units at the facility have been shut down, and SABIC disclaims any intention or right to operate

9226 Dupont Road
P.O. Box 68
Washington, WV 26181
T: +1 304 863 7793
F: +1 304 863 7825
E: Scott.Dansey@sabic-ip.com
www.sabic-ip.com

them or re-start them. SABIC intends that this surrender of its Title V permit terminate the status of its facility as a Clean Air Act "major source".

In addition, SABIC is surrendering, effective August 13, 2015, all active Air Permits for this facility issued pursuant to the requirements of 45CSR13. It is SABIC's belief that the following table lists all such R13 permits, but if any R13 permit is active and not listed below, it is SABIC's intent to surrender that permit as well:

Permit or Consent Order Number	Date of Issuance
R13-0009B	April 5, 2010
R13-2486A	March 15, 2005
R13-1886F	July 28, 2011
R13-2084C	February 18, 2009
R13-2572E	October 29, 2013
R13-2678A	July 28, 2011
R13-2288C	September 14, 2006
R13-1588D	April 4, 2012
R13-1351A	February 22, 2002
R13-1133A	March 7, 2002
R13-1097	May 9, 1989
R13-1069	December 30, 1988
R13-1009A	October 9, 2003
R13-0992B	October 14, 2003
R13-0658B	July 28, 2011
R13-0301A	March 7, 2002

Based on the foregoing, SABIC requests that the Director acknowledge, in writing, that SABIC's Title V permit and all active R13 permits expired effective August 13, 2015. However, please note that the lack of an acknowledgement will not alter the effect of SABIC's surrender of all such permits.

SABIC has been complying with the WV DEP Industrial Facility Closure Guidance Document requirements with the assistance of our consultant, Michael Baker Jr., Inc., and in coordination with the WV DEP, and will continue to do so. The planned disposition of the manufacturing site is full demolition to grade by the end of 2015, followed by the sale of the property.

In addition, please note that SABIC will submit its Annual Air Emission Report (SLEIS) for RY2015 by September 1, 2015 and will pay the appropriate fee when invoiced.

Thank you for your attention to this important matter. Please contact me at 304-863-7793 if you have any questions.

Pursuant to 45CSR30-4.4, I certify that, based on information and belief formed after reasonable inquiry, that the statements made in this letter are true, accurate and complete.

Respectfully Submitted,

Scott Dansey

Scott Dansey
Site Manager

cc: Doug Hammell – WV DEP - DAQ
Carrie Mccumbers – WV DEP - DAQ
Beverly Mckeone – WV DEP - DAQ

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ICI BOILERS – COAL

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Bayer Crop Science

54-039-00007

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west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304 926 0475 • FAX: 304 926 0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

February 3, 2017

Vince McCormick, QHSE Manager
Bayer CropScience, LP
P.O. Box 1005
Institute, WV 25112-1005

Re: Company ID No. 039-00007
Permits R13-0277, R13-2001B, R13-2190A
Institute Site

Dear Mr. McCormick:

Pursuant to your letter, dated January 30, 2017, Permits R13-0277, R13-2001B, and R13-2190A have been placed as inactive.

Please bear in mind, any future operation may require a permit pursuant to 45CSR13.

Sincerely,

William F. Durham
Director

WFD/jlr

c: Linda Tennant
Robert Keatley
File Room

Promoting a healthy environment.

William F. Durham, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, West Virginia 25304

RECEIVED
FEB 01 2017
WV DEP / DIV OF AIR QUALITY

CERTIFIED MAIL
(Return Receipt Requested)
7010 0290 0000 3548 9372

Re: #2 Powerhouse Title V – Request to Close Permits
Company ID: 54-039-00007
Title V Permit R30-03900007-2016

January 30, 2017

Bayer
Institute Site
P.O. Box 1005
Institute, WV
25112-1005

Office 304.767.6218
Cell 304.380.7702
Fax 304.767.6646

Dear Director Durham,

On January 27, 2017 at 11:37 AM, the #2 Powerhouse has ceased all operations. Boilers #10, #11 and #12 and all systems related to the operation of the Powerhouse have been shut down. Demolition of the entire unit will begin in February 2017.

The following permits were applicable to the operation of the #2 Powerhouse and included as part of the Title V Permit. I request that these permits be classified as inactive. They include:

R13-0277 - #2 Coal to Steam Conversion
R13-2001-B – Flyash Storage Silo
R13-2190-A – Lime Storage Silo

If you have any questions or need additional information please contact Linda Tennant at 304.767.6161 or linda.tennant@bayer.com.

Sincerely,

Vince McCormick
QHSE Manager

West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on December 29, 2010.

Permit Number: **R30-03900007-2010**
Application Received: **August 12, 2013**
Plant Identification Number: **03-54-03900007**
Permittee: **Bayer CropScience**
(Powerhouses/Maintenance/WWTU/Laboratory)
(Group 1 of 8)
Facility Name: **Institute Site**
Mailing Address: **P.O. Box 1005**
Institute, WV 25112

Permit Action Number: SM01 Revised: March 27, 2014

Physical Location:	Institute, Kanawha County, West Virginia
UTM Coordinates:	432.0 km Easting • 4,248.3 km Northing • Zone 17
Directions:	The facility is located west of Institute, WV, adjacent to State Route 25 and West Virginia State College.

Facility Description

Bayer CropScience is a chemical plant to produces LARVIN brand thiodicarb, which is used as an agricultural chemical. SIC Codes: 2879; 2869

Group Description

The facility was divided into 8 Title V Permits. They were broken down as follows:
Group 1 – Powerhouses, Maintenance, Wastewater Treatment Unit, Laboratories
Group 2 – Rhodimet (This Permit was made inactive on December 23, 2013)
Group 3 – Carbofuran Unit, Carbosulfan Unit (This Permit was made inactive on December 23, 2013)
Group 4 – Aldicarb, BPMC, Oxamyl (This Permit was made inactive on December 23, 2013)

Group 5 – Polymers (Note this process was closed in 2004 and no Title V Group 5 Permit was issued)
Group 6 – Larvin Unit
Group 7 – Naphthol Unit, PANA, Jet (This Permit was made inactive on December 23, 2013)
Group 8 – Phosgene, MIC, SEVIN (This Permit was made inactive on December 23, 2013)

Emissions Summary

This significant modification SM01 incorporates the R13-3111 applicable requirements resulting from the installation of two 80 MM BTU/hr natural gas boilers (Boilers 13 and 14); and the shutdown of Boilers 3, 4, and 5, and all other emission points in Powerhouse #1.

The shutdown of Boilers 3, 4, and 5 will result in a reduction of potential emissions. Previous Condition 4.1.2 limited particulate matter emissions for the boilers to 16.2 lbs/hr each. Previous Condition 4.1.8 limited sulfur dioxide emissions for the boilers to 288 lbs/hr each.

The addition of Boilers 13 and 14 will generate the following emissions for each boiler:

Pollutant	lbs/hr	tpy
CO	6.6	28.9
NO_x	3.9	17.2
CO_2 equivalents	9,411.8	41,223.5
PM_{10}	0.6	2.7
Total VOC	0.5	2.0
Total HAPs	0.2	0.7

Title V Program Applicability Basis

This facility still has the potential to emit over 100 TPY of criteria pollutants and over 25 TPY of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, and over 25 tons per year of aggregate HAPs, Bayer CropScience's Institute Site is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate Matter emissions
	45CSR10	Sulfur Oxide emissions
	45CSR13	Permits for construction, modification, relocation, etc.
	45CSR16	New Stationary Sources
	45CSR30	Operating permit requirement.

	45CSR34	Hazardous Air Pollutants
	40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial Steam Generating Units
	40 C.F.R. Part 63 Subpart DDDDD	NESHAP for Boilers and Process Heaters
State Only:	N/A	

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-3111	January 16, 2014	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

45CSR2 - To Prevent and Control Air Pollution from Combustion of Fuel in indirect heat exchangers.

Boilers 13 and 14 are subject to the opacity requirements of 45CSR§2-3.1. This is given in new Condition 4.1.4. As the boilers use natural gas, 45CSR§2-8.4.b exempts them from opacity monitoring or testing.

The particulate matter limits for the boilers are derived from 45CSR§2-4.1.b for Type “b” fuel burning units. The PM limits were calculated as follows:

Boiler	Heat Input (MMBTU)		Type ‘b’ Factor		PM Limit (lbs/hr)
#13	80	x	0.09	=	7.2
#14	80	x	0.09	=	7.2

The R13-3111 application shows PM emission calculations of 0.62 lbs/hr for these boilers which is much less than the 45CSR§2-4.1.b limit. Compliance with the particulate matter limits will be shown by Condition 4.1.1.e, which requires that only pipeline natural gas be used as fuel for the boilers.

45CSR10 - To Prevent and Control Air Pollution From the Emission of Sulfur Oxides:

The boilers have Rule 10 applicable SO_2 limits which are based upon 45CSR§10-3.2.c for Type 'b' sources. The SO_2 limits were calculated as follows.

Boiler	Heat Input (MMBTU)		Type 'b' Factor		SO_2 Limit (lbs/hr)
13	80	x	1.6	=	128
14	80	x	1.6	=	128

The R13-3111 application shows SO_2 emission calculations of 0.05 lbs/hr for these boilers. The 45CSR§10-3.2 requirements are given in Condition 4.1.6. Compliance with the SO_2 limits will be shown by Condition 4.1.1.e, which requires that only pipeline natural gas be used as fuel for the boilers. Since these boilers use only natural gas as fuel, 45CSR§10-10.3 exempts these boilers from the Testing, Monitoring, Recordkeeping, and Reporting requirements of 45CSR§10-8.

Other changes made to the Title V Permit as part of this significant modification are summarized below:

1. The emission unit table in Section 1.1 has been revised. Powerhouse #1 which contained Boilers #3, #4, and #5, as well as supporting equipment has been removed. Boilers 13 and 14 have been added to the emission unit table.

2. R13-3111 has been added to Section 1.2 and Condition 3.1.10. Although R13-1308A is still an active permit, the equipment that was permitted has been removed. Therefore, it was removed from Section 1.2 and Condition 3.1.10.

3. All previous Conditions in Section 4.1 have been removed. New Condition 4.1.1 provides specific emission limits for Boilers 13 and 14, as well as the 40 CFR 63 Subpart DDDDD requirements for annual tune-ups from 40 CFR §63.7500(a)(1), §63.7505(a), §63.7510(e), §63.7515(d), §63.7540(a)(10), and Table 3 to Subpart DDDDD of Part 63—Work Practice Standards. There is also a requirement to use pipeline quality natural gas with an annual limit of consumption for each boiler of 692 MM cubic feet. Using only pipeline quality natural gas meets the requirements of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.

4. New Condition 4.1.2 requires a one time energy assessment of the facility that includes Boilers 13 and 14. This is a requirement from 40 CFR §63.7500(a)(1), §63.7505(a), and Table 3 of 40 CFR 63 Subpart DDDDD.

5. New Condition 4.1.3 requires the permittee to operate all pollution control equipment related to Boilers 13 and 14 in a manner consistent with safety and good air pollution control practices.

6. All previous Conditions of Section 4.2 have been removed.

7. All previous Conditions of Section 4.3 have been removed.

8. All previous Conditions of Section 4.4 have been removed. New Conditions 4.4.1 through 4.4.3 require the facility to keep records of monitoring, maintenance, and malfunctions of Boilers 13 and 14. New Condition 4.4.4 requires records of concentrations of Carbon Monoxide (CO) in the effluent stream, oxygen in volume percent, as well as a description of any corrective action taken as a part of a tune-up. This is a requirement from 40CFR§§63.7540(a)(10)(vi)(A) and (B). New Condition 4.4.5 requires the permittee to record the hours of operation and amount of natural gas consumed by each boiler. This will show compliance with the natural gas usage requirements and also the hourly and annual emission limits for CO, NO_x, and CO_2e of Condition 4.1.1.

9. All previous Conditions of Section 4.5 have been removed. New Condition 4.5.1 requires the permittee to submit annual "Compliance Reports" to the Director with the information specified and on the dates given. This is a requirements from 40CFR§§63.7550(a)-(c).

10. Boilers 13 and 14 are subject to 40CFR60, Subpart Dc. This subpart provides requirements for Boilers built after June 9, 1989 that are between 10 and 100 MMBtu/hr. Since Boilers 13 and 14 burn natural gas only, they are not subject to the SO_2 and PM standards, emission testing, or monitoring. They are only subject to monthly recordkeeping under 40CFR§60.48c(g)(2). New Condition 4.4.5 requires the Permittee to record and maintain records of the amount of natural gas combusted during each calendar month. This meets the requirements of 40CFR§60.48c(g)(2).

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)

   Boilers 13 and 14 have been added as a result of this Significant Modification. These boilers are not subject to CAM for the following reason:
   40CFR§64.2(a)(2) – The boilers do not use a control device to achieve compliance with an emission limitation or standard.

2. Greenhouse Gas Tailoring Rule
   This modification did not trigger a PSD permit. As such, there are no applicable GHG permitting requirements.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: February 7, 2014
Ending Date: March 10, 2014

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Mike Egnor
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

None

ICI BOILERS – COAL/STOKER

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Chemours – Washington Works

54-107-00001

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west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304 926 0475 • FAX: 304 926 0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, West Virginia 25304-2345

v.

Order No.: CO-R8-C-2017-17
Facility ID No. 03-54-107-00182

THE CHEMOURS COMPANY FC, LLC
Washington Works
P.O. Box 1217 – Building 1
Washington, West Virginia 26181-1217

Consent Order

This Consent Order (Order) is issued by the Director of the Division of Air Quality (Director), under the authority of West Virginia Code, Chapter 22, Article 5 , Section 1 *et seq.* to The Chemours Company FC, LLC (Chemours).

I. Findings of Fact

In support of this Order, the Director, Division of Air Quality (DAQ), hereby finds the following:

1. Chemours owns a chemical manufacturing site in Washington, West Virginia (the Facility). Chemours produces Fluropolymers and Fluromonomers at the Facility, as well as coproduces industrial chemicals for commercial sale. DowDuPont and Kuraray operate chemical manufacturing facilities as tenants at the Facility.

2. Chemours manages and operates the plant infrastructure to support the operating business units. As part of these operations, Chemours operates both gas and coal fired boilers to produce steam for on-site use.
3. Chemours emitted 2,265 tons of sulfur dioxide (SO_2) in calendar year 2014.
4. The Facility is not located in a designated nonattainment area, and had actual SO_2 emissions in excess of 2,000 tons in calendar year 2014. Therefore, Chemours is an applicable source pursuant to 40 CFR Part 51, Subpart BB – Data Requirements for Characterizing Air Quality for the Primary SO_2 National Ambient Air Quality Standard (NAAQS).
5. West Virginia DAQ is required to characterize the SO_2 emissions from Chemours pursuant to 40 CFR 51.1203.
6. Chemours identified all of its stack and fugitive sources of SO_2 emissions at the Facility. The primary Chemours sources of SO_2 at the Facility are the 5 coal-fired boilers. Chemours also operates a natural gas-fired boiler with potential SO_2 emisssions of 0.48 ton/year (tpy), a thermal converter (CISWI unit) with potential SO_2 emissions of 1.8 tpy, 4 industrial furnaces with combined potential SO_2 emissions of 0.15 tpy, and 2 gas-fired dryers with combined potential SO_2 emissions of 0.04 tpy.

Boiler	**Size (MMBtu/hr)**	**Type**	**Date of Installation**	**SO_2 limit (lb/hr)**
#2 Boiler	64.2	Coal-fired stoker	1947	199.02
#3 Boiler	94.0	Coal-fired stoker	1957	291.4
#4 Boiler	125.0	Coal-fired stoker	1959	387.5
#5 Boiler	181.0	Coal-fired stoker	1963	561.1
#6 Boiler	241.0	Coal-fired stoker	1965	747.1

7. Chemours performed preliminary AERMOD modeling which indicated potential exceedances of the 2010 1-hour SO_2 NAAQS in Wood County, West Virginia and Washington County, Ohio.

8. DAQ performed refined AERMOD modeling which continued to show potential exceedances of the 2010 1-hour SO_2 NAAQS in Wood County, West Virginia and Washington County, Ohio.
9. Chemours proposes to substantially reduce SO_2 emissions by replacing the five existing boilers at the Facility with combustion units fired by pipeline quality natural gas.

II. Order for Compliance

Now, therefore, in accordance with Chapter 22, Article 5, Section 1 *et seq.* of the West Virginia Code, it is hereby agreed between the parties, and ORDERED by the Director:

1. Chemours shall submit to the Director a complete permit application to replace the five existing boilers at the Facility with combustion units fired by pipeline quality natural gas by August 1, 2018.
2. Chemours shall respond to any notices from the Director of application deficiencies within 15 days of receipt.
3. Chemours shall submit to the Director an engineering/installation schedule with milestones for completion of the modifications within 30 days of permit issuance.
4. Chemours will submit to the Director a quarterly status report of Chemours' satisfaction of the milestones in engineering/installation schedule. The status report shall be submitted by the end of each calendar quarter following Chemours' submission to the Director of the engineering/installation schedule pursuant to Paragraph 3.
5. Chemours shall permanently cease operation of the 5 coal-fired boilers, by December 31, 2021.
6. Chemours shall notify the Director of the completion of the requirements of Paragraph 5.

III. Other Provisions

1. Chemours hereby waives its right to appeal this Order under the provisions of Chapter 22, Article 5, Section 1 of the Code of West Virginia. Under this Order, Chemours agrees to take all actions required by the terms and conditions of this Order and consents to and will not contest the Director's jurisdiction regarding this Order. However, Chemours does not admit to any factual and legal determinations made by the Director and reserves all rights and defenses available regarding liability or responsibility in any proceedings, other than proceedings, administrative or civil, to enforce this Order.
2. The Director reserves the right to take further action if compliance with the terms and conditions of this Order does not adequately address the NAAQS nonattainment noted herein and reserves all rights and defenses which he or she may have pursuant to any legal authority, as well as the right to raise, as a basis for supporting such legal authority or defenses, facts other than those contained in the Findings of Fact.
3. Chemours' compliance with the terms of this Order shall satisfy the SO_2 emission reduction obligations otherwise applicable to the Facility relative to attainment with the 2010 1-hour SO_2 NAAQS.
4. Except as otherwise provided herein, compliance with the terms and conditions of this Order shall not in any way be construed as relieving Chemours of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable to the Facility. Violations of the terms and conditions of this Order may subject Chemours to additional penalties and injunctive relief in accordance with the applicable law.
5. With the exception of SO_2, nothing in this Order shall limit or prevent Chemours from generating and preserving emission reduction credits otherwise available to Chemours under federal and state law as a result of shutting down the existing coal-fired boilers at the Facility.
6. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.
7. This Order is binding on Chemours, its successors and assigns.

8. This Order shall become effective immediately upon signing by both parties.
9. This Order shall terminate upon written notice from the Director confirming that the requirements of this Order have been completed.

The Chemours Company FC, LLC

Jan. 12, 2018

Name: Robert Fehrenbacher — Date

Title: Plant Manager, Washington Works

West Virginia Department of Environmental Protection
Division of Air Quality

12-19-2017

Name: William F. Durham, Director — Date

Title: Director, Division of Air Quality

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Ox Paperboard

54-037-00007

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West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Ox Paperboard, LLC
Halltown Mill/Halltown, WV
R30-03700007-2017

William F. Durham
Director

Issued: May 9, 2017 • Effective: May 23, 2017
Expiration: May 9, 2022 • Renewal Application Due: November 9, 2021

Permit Number: **R30-03700007-2017**
Permittee: **Ox Paperboard, LLC**
Facility Name: **Halltown Mill**
Permittee Mailing Address: **P.O. Box 70, Halltown, WV 25423**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Halltown, Jefferson County, West Virginia
Facility Mailing Address:	Same as above
Telephone Number:	(304) 725-2076
Type of Business Entity:	LLC
Facility Description:	Ox Paperboard, LLC is a producer of 100% recycled paperboard from recovered papers.
SIC Codes:	2631
UTM Coordinates:	776.32 km Easting • 4356.17 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 4

3.0. Facility-Wide Requirements and Permit Shield 12

Source-specific Requirements

4.0. Boiler Requirements 19

5.0. Paperboard Mill, Carpenter Shop Requirements 34

6.0. Emergency Generator Requirements 36

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001	BLR-2	E. Keeler Co. Model: MKB coal-fired boiler. Serial No. 17148	1984	112 MMBtu/hr	C-3: Dry Sorbent Injection System 44,400 acfm C-4: Fabric Filter Baghouse 44,400 acfm
003	WTP-1	Wastewater Treatment Plant - consists of a dissolved air filtration (DAF) clarifier, a settling clarifier, two clarified water storage tanks, a sequencing batch reactor (SBR) treatment tank, a chlorine contact basin, and an effluent holding tank	1970	1.8 MGD	None
004	PM-1	Paperboard Mill	1870	73,000 tons/year	None
005	PM-2	Carpenter Shop	1870	N/A	Cyclone C-2
006	EMG-1	Emergency Generator; diesel-fired.	Circa 1985	75 HP	None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0622A	**January 4, 2016**

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.
[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement. **[45CSR§30-5.7.e.]**

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act. **[45CSR§30-5.2.a.]**

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 CFR Part 2. **[45CSR§30-5.1.f.5.]**

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information. **[45CSR§30-4.2.]**

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.
[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.
[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 CFR § 61.145, 40 CFR § 61.148, and 40 CFR § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 CFR § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 CFR 61 and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 CFR §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR § 82.161.

[40 CFR 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 CFR § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.
[40 CFR 68]

3.1.9. No person shall cause, suffer, allow, or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.*
[45CSR§7-5.1.]

3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.*
[45CSR§7-5.2.]

Note: The boiler and its fuel/ash handling systems and associated equipment are not subject to permit conditions 3.1.9. and 3.1.10., but are regulated under 45CSR2 of which the requirements are listed in section 4 of this permit.

3.1.11. The potential to emit of hazardous air pollutants (HAPs) from the facility shall not exceed 25 tons per year with no single HAP greater than 10 tons. Compliance with this limit is satisfied by complying with Conditions 4.1.2., 4.1.3., 4.1.6., 4.1.8., and 4.1.12. through 4.1.20. of this permit.
[45CSR13, R13-0622, 3.1.7.]

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 CFR Parts 60, 61, and

63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A. and 45CSR13, R13-0622, 4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5. and 3.5.6. below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email, as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]: DEPAirQualityReports@wv.gov

[1]For all self monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ: DEPAirQualityReports@wv.gov **USEPA:** R3_APD_Permitting@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ: DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.
[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. Not applicable.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. 40 CFR 60, Subpart Db - *Standards of performance for Industrial-Commercial-Institutional Steam Generating Units.* The coal-fired boiler 001 (BLR-2) commenced construction prior to and has not undergone a modification or reconstruction after June 19, 1984.

b. 40 CFR 60, Subpart K - *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.* Halltown does not utilize storage vessels for petroleum liquids as defined in the rule.

c. 40 CFR 60, Subpart Ka - *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.* Halltown does not utilize storage vessels in the capacity for which this subpart is applicable.

d. 40 CFR 60, Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.* Halltown has not commenced construction, modification, or reconstruction of storage tank 002-03 since July 23, 1984 and therefore is not subject to this subpart.

e. 40 CFR 60, Subpart BB - *Standards of Performance for Kraft Pulp Mills.* Halltown does not operate a kraft pulp mill.

f. 40 CFR 63, Subpart S - *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*: Halltown utilizes mechanical pulping of recycled material. The Halltown process does not include digesters, bleaching operations, or chemical pulping processes in its papermaking process.

g. 40 CFR 63, Subpart JJJJ - *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*: The Halltown process does not include web coating lines and does not include the application of web coating materials in its papermaking process.

h. 40 CFR 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters:* The facility had been a major source of HAPs making it subject to the Industrial Boiler MACT for Major Sources. The compliance date for the MACT was January 31, 2016. By restricting the fuel consumption of the boiler and installing controls before the compliance date, the facility is no longer subject to this MACT, and becomes subject to the Industrial Boiler GACT for Area Sources, 40 CFR 63 Subpart JJJJJJ.

i. 40 CFR 68 *Chemical Accident Prevention Provisions*. Halltown does not use in a process, any regulated substance listed in 40 CFR §68.130 in an amount above the threshold quantities listed under 40 CFR §68.115.

4.0. Boiler Requirements [emission point IDs: BLR-2]

4.1. Limitations and Standards

4.1.1. Boiler 001 including its associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§2-9.2.]

4.1.2. The permittee shall limit the annual capacity of the boiler to no more than 40 percent by limiting the annual fuel usage to 15,000 tons on 12-month rolling total, demonstrated in accordance with Condition 4.4.6.e.
[45CSR13, Permit No. R13-0622, 4.1.1.a. and 45CSR30]

Visible Emissions (VE) and Particulate Matter (PM)

4.1.3. Visible emissions of smoke and/or particulate matter from boiler stack (*BLR-2*) shall not exceed ten (10) percent opacity based on a six minute block average. Continuous compliance with this limit is satisfied by operating and maintaining the fabric filter control device (C-4) such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
[45CSR§2-3.1., 45CSR13, R13-0622, 4.1.1.c.]

4.1.4. An exception to the visible emissions limit of condition 4.1.3. above, shall be granted during periods of soot blowing operations. The exception period shall not exceed a total of six (6) six minute time periods in a calendar day with visible emissions limited to thirty percent (30%) opacity, as determined in accordance with 40 CFR Part 60, Appendix A, Method 9, or by using measurements from a certified continuous opacity monitoring system.
[45CSR§2-3.3.]

4.1.5. The visible emission standards of 4.1.3. and 4.1.4. above, shall apply at all times except in periods of start-ups, shutdowns and malfunctions.
[45CSR§2-9.1.]

4.1.6. Particulate matter emissions from the stack (*BLR-2*) venting the boiler 001 shall not exceed 6.82 pounds per hour based on a six hour average.
[45CSR§2-4.1.c., 45CSR13, R13-0622, 4.1.1.b.]

4.1.7. No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;

b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and

c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.]

Sulfur Dioxide (SO_2)

4.1.8. Sulfur dioxide emissions from the stack (*BLR-2*) venting boiler 001 shall not exceed 277.78 lb/hr and 484.50 tons per year. For the purpose of complying with this limit, the boiler shall not consume more than 4.3 tons of coal per hour nor more than 15,000 tons per year. The permittee is limited to burning coal with a sulfur content no greater than 1.7% by weight.
[45CSR§10-3.3.f., 45CSR13, R13-0622, 4.1.1.d. and h.]

4.1.9. Compliance with the allowable sulfur dioxide emission limitations from boiler 001 shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10 (*permit condition 4.1.8. above*), except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.1.10. The owner or operator of fuel burning unit(s) shall demonstrate compliance with section 3 of 45CSR10 (*permit condition 4.1.8. above*) by testing and/or monitoring in accordance with one or more of the following: 40 CFR part 60, Appendix A, Method 6, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.
[45CSR§10-8.2.c.]

4.1.11. No owner or operator subject to the provisions of 45CSR10 shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

Permit R13-0622

4.1.12. Hydrochloric acid emissions from Emission Point BLR-2 shall not exceed 1.26 lbs/hr nor 2.20 tons/year.
[45CSR13, R13-0622, 4.1.1.e.]

4.1.13. Carbon monoxide emissions from Emission Point BLR-2 shall not exceed a concentration level of 420 ppm on a dry basis corrected to 3 percent oxygen. During performance testing that demonstrates compliance with this CO limit, the permittee shall develop minimum oxygen content in accordance with row 3 of Table 6 to 40 CFR 63, Subpart JJJJJJ – Establishing Operating Limits. Compliance with this limit is satisfied by maintaining the 30-day rolling average oxygen content at or above the minimum oxygen level established during the most recent CO performance test - 9.45 percent. Operation below the established minimum operating limits specified in this requirement constitutes a deviation from operating limits established under 40 CFR 63, Subpart JJJJJJ, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.
[45CSR13, R13-0622, 4.1.1.f., 45CSR34, and 40 CFR §§63.11201(a), 63.11222(a)(1), and row 6 of Table 1 in Subpart JJJJJJ of Part 63 – Emission Limits]

4.1.14. Mercury emissions from Emission Point BLR-2 shall not exceed 2.2E-5 pounds per MMBtu of heat input on a 30-day rolling average basis.
[45CSR13, R13-0622, 4.1.1.g., 45CSR34, and 40 CFR §63.11201(a) and row 6 of Table 1 in Subpart JJJJJJ of Part 63 – Emission Limits]

4.1.15. The permittee shall install and operate an activated carbon injection system to control mercury emissions. Prior to establishing minimum activated carbon injection operating limit, the minimum injection rate of activated carbon shall not be less than 5 lb of activated carbon per 112 MMBtu of heat input (which equates to 0.045 lb of activated carbon per MMBtu) on a 30 day rolling average basis. The minimum activated carbon injection rate means the load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 6 in 40 CFR 63, Subpart JJJJJJ during the most recent performance stack test demonstrating compliance with the applicable emission limit. Following the date on which the initial compliance demonstration is completed or is required to be completed under Condition 4.3.3., whichever date comes first, the permittee must continuously monitor the operating parameters. Operation below the established minimum operating limits specified in this requirement constitutes a deviation from operating limits established under 40 CFR 63, Subpart JJJJJJ, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. Minimum activated carbon injection operating limit - 10.0 pph × (load rate/112 mmBtu). **[45CSR13, R13-0622, 4.1.1.i., 45CSR34, and 40 CFR §§ 63.11211(b)(3), 63.11222(a)(1), 63.11201(c), and Table 3, row 4]**

4.1.16. The permittee shall install and operate a dry sorbent injection system on or before January 31, 2016 to meet the hourly and annual HCl emission limits in section 4.1.12. Prior to establishing a 30-day rolling minimum dry sorbent injection rate in accordance with section 4.3.3., the hourly hydrated lime injection rate shall be 30 pounds per hour. Following the date on which the initial compliance demonstration is completed or is required to be completed under section 4.3.4., whichever date comes first, the permittee must continuously monitor the operating parameters. Operation below the established minimum operating limits specified in this requirement constitutes an exceedance of the limits in section 4.1.12., except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. Minimum dry sorbent injection rate - 35.64 pph. **[45CSR13, R13-0622, 4.1.1.j., 45CSR34, and 40 CFR §§ 63.11222(a)(1), 63.11201(c), Table 3, row 4]**

4.1.17. The permittee shall develop and submit to the Director a site specific monitoring plan for the Continuous Parameter Monitoring System (CPMS) for the oxygen analyzer, activated carbon injection and dry sorbent systems. This plan shall include a means to measure the amount of heat input or load produced by the unit. Such plan shall be submitted 60 days prior to conducting the required testing in Condition 4.3.3. according to the following requirements.

i. Installation of the continuous measuring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.* on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

iii. Performance evaluation procedures and acceptance criteria (*e.g.* calibrations).

iv. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §63.8(c)(1)(ii).

v. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR §63.8(d) and

vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR §§63.10(c) (as applicable in Table 8 in 40 CFR 63, Subpart JJJJJJ), (e)(1), and (e)(2)(i).
[45CSR13, R13-0622, 4.1.1.l., 45CSR§13-5.11., 45CSR34, and 40 CFR §§ 63.11205(c), (c)(1) through (c)(3)]

4.1.18. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan as required in section 4.1.17.
[45CSR13, R13-0622, 4.1.1.m., 45CSR§13-5.11., 45CSR34, and 40 CFR §§ 63.11205(c)(2)]

4.1.19. The permittee shall minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the permittee shall follow the recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
[45CSR13, R13-0622, 4.1.1.n., 45CSR34, and 40 CFR §63.11223(g)]

4.1.20. The permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following with extent of the evaluation for the items (i) to (iv) appropriate for the on-site technical hours listed in 40 CFR §63.11237:

i. A visual inspection of the boiler system;

ii. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints;

iii. An inventory of major energy use systems consuming energy from the boiler and which are under control of the permittee;

iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

v. A list of the energy conservation measures that are within the permittee's control;

vi. A list of the energy savings potential of the energy conservation measures identified; and

vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
[45CSR13, R13-0622, 4.1.1.o., 45CSR34, 40 CFR §§63.11201(b) & 63.11214(c); and row 16 of Table 2 in 40 CFR 63 Subpart JJJJJJ – Work Practice Standards]

4.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the Dry Sorbent Injection System (C-3) and Fabric Filter Baghouse (C-4) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-0622, 4.1.2. and 45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. The permittee shall monitor visible emissions from boiler 001 (*BLR-2*) when in operation, in accordance with the following procedures, test methods and frequencies;

a. 40 CFR 60, Appendix A, Method 9, shall be used to determine opacity. Prior notification and pre-test plan are not required to be submitted for each test conducted. In accordance with Method 9, each observation shall be a minimum of six (6) minutes, unless any one 15 second reading is equal to or greater than the opacity limit for the emission unit, in which case the observation period shall be extended to a minimum of 60 minutes or until a violation of the emissions standard has been documented; whichever is a shorter period.

b. The permittee shall use the following monitoring schedule for conducting the visible emissions tests for boiler 001 (*BLR-2*) except that the monitoring frequency in use at the "Effective" date of this renewal permit may be continued in accordance with the schedule below:

1. The initial monitoring frequency for performing visible emission tests shall be on a daily basis.

2. If the visible emission tests show compliance with the applicable opacity limit specified in 4.1.3. for thirty (30) consecutive days of operation, the tests need only be done once per week, or at any other time visible emissions are observed.

3. All visible emissions test shall be conducted during operating conditions that are representative of normal boiler operation.

4. If an exceedance of the applicable opacity limit is observed, the frequency of emissions tests will start over according to the initial frequency of daily tests

c. If observations cannot be made due to boiler downtime or upset, weather conditions, or other uncontrollable conditions that would interfere with the observations, such conditions shall be noted on the data observation sheet and at least three (3) attempts to conduct the tests at approximately two 2-hour intervals throughout the day. Observation attempts shall be made daily until a valid observation period is completed.

[45CSR§30-5.1.c., 45CSR§§2-3.2., 8.1.a & 8.2., 45CSR2 & 10 Monitoring Plan §§A.1.a., b., d., 40 CFR §§64.3(a), 64.3(b), 64.6(c)(2), and 64.7(d)]

4.2.2. The permittee shall monitor visible emissions from emission boiler 001 (*BLR-2*) in order to demonstrate compliance with the soot blowing variance specified in 4.1.4. in accordance with the following procedures, test methods and frequencies during soot blowing operations;

a. 40 CFR 60, Appendix A, Method 9 shall be used to determine opacity. Prior notification and pre-test plan are not required to be submitted for each test conducted. Each observation shall be a minimum of six (6) minutes for soot blowing periods. If the six (6) minute block average is greater than the approved opacity limit during soot blowing operations or during the cleaning of a firebox, the observation period shall be extended to encompass the entire soot blowing or cleaning cycle.

b. The permittee shall use the following monitoring schedule for conducting the visible emissions tests for boiler 001 (*BLR-2*) during soot blowing operations except that the monitoring frequency in use at the "Effective" date of this renewal permit may be continued in accordance with the schedule below:

1. The initial monitoring frequency for performing visible emission tests shall be on a weekly basis, or during one soot blowing episode per week.

2. If the tests conducted during sixteen (16) consecutive weeks demonstrate compliance with the applicable opacity limit specified in 4.1.4., the tests need only be done during one soot blowing or cleaning of a firebox operation per month.

3. If an exceedance occurs, it shall be properly reported in accordance with Section(s) 3.5 and/or 4.5 of this permit.

c. If observations cannot be made due to a unit downtime or upset, weather conditions, or other uncontrollable conditions that would interfere with the observations, such conditions shall be noted on the data observation sheet and at least three (3) attempts to conduct the tests at approximately two 2-hour intervals throughout the day. Observation attempts shall be made daily until a valid observation period is completed.

[45CSR§30-5.1.c., 45CSR§§2-3.2., 8.1.a & 8.2., 45CSR2 & 10 Monitoring Plan §§A.2.a. & b.]

4.2.3. The permittee shall practice proper operation of baghouse "C-4" for boiler 001 (*BLR-2*) and exhaust system. This shall include installation of broken bag detectors, prompt replacement of broken bags, proper fan operation, prompt replacement of broken fans and duct work, and daily inspections to insure proper operation. Daily inspections shall include conducting pressure drop measurements.
[45CSR§30-5.1.c., 45CSR2 & 10 Monitoring Plan §A.4.c., 40 CFR §§64.3(a) and 64.3(b)]

4.2.4. At the request of the Secretary the owner and/or operator of a source shall install such stack gas monitoring devices as the Secretary deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Secretary may specify. At the request of the Secretary, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a,]

4.2.5. The differential pressure drop across each of the four baghouse compartments shall be monitored on an hourly basis and maintained within the range of 4 to 6 inches of water column (wc). A manual log shall be kept on site with entries based on indicator gauge readings. The indicator gauges, mounted on each baghouse compartment, shall be examined weekly to ensure they are functioning properly. The hourly readings shall be averaged over a 4-hour period. A 4-hour average outside 4"-6" range is considered an excursion. If an excursion occurs, corrective action, if necessary, shall be taken as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
[45CSR§30-5.1.c., 40 CFR §§64.3(a), 64.3(b), 64.6(c)(2), and 64.7(d)]

4.2.6. *Proper Maintenance* – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[45CSR§30-5.1.c., 40 CFR §64.7(b)]

4.2.7. *Continued Operation* – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. Part 64, including data averages and calculations, or fulfilling a minimum data

availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[45CSR§30-5.1.c., 40 CFR §64.7(c)]

4.2.8. *Response to Excursions or Exceedances*

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[45CSR§30-5.1.c., 40 CFR §64.7(d)]

4.2.9. *Documentation of Need for Improved Monitoring* – After approval of monitoring under 40 CFR Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[45CSR§30-5.1.c., 40 CFR §64.7(e)]

4.2.10. The permittee shall conduct fuel analysis of each shipment received at the facility to demonstrate that the coal meets the sulfur specification of section 4.1.8. Such records shall be maintained in accordance with section 3.4.2.
[45CSR13, R13-0622, 4.2.1., 45CSR§10-8.2.c.3.]

4.2.11. The permittee shall conduct fuel (coal) analysis in accordance with the following procedures:

a. At a minimum, the permittee must obtain three composite coal samples according to the procedures in 40 CFR §63.11213(b) or ASTM D2234/D2234M or equivalent method for coal. During performance testing for mercury, each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.

b. The composited fuel samples must be prepared in accordance with ASTM D2013/D2013M or equivalent method for coal.

c. Determine the heat content of the fuel type in accordance with ASTM 5865 or equivalent method for coal.

d. Determine the moisture content of the fuel type in accordance with ASTM D3173 or ASTM E871 or equivalent method for coal.

e. Measure the mercury concentration in the fuel sample using ASTM D6722 or equivalent method for coal.

f. Convert the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample.

[45CSR13, R13-0622, 4.2.2., 45CSR34, 40 CFR §63.11213 and Table 5 to Subpart JJJJJJ of Part 63 – Fuel Analysis Requirements]

4.2.12. If the permittee demonstrates compliance with the mercury emission limit based on fuel analysis, the fuel analysis must be in accordance with section 4.2.11. Records of such analysis shall be maintained in accordance with section 3.4.2.

The permittee must conduct a fuel analysis according to 40 CFR §63.11213 for each type of fuel burned as specified in paragraphs (c)(1) and (2). If you plan to burn a new type of fuel or fuel mixture, you must conduct a fuel analysis before burning the new type of fuel or mixture in your boiler. The permittee must recalculate the mercury emission rate using Equation 1 of 40 CFR §63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.

a. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, the permittee does not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements.

b. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, the permittee must conduct quarterly sampling.

[45CSR13, R13-0622, 4.2.3., 45CSR34, 40CFR §63.11220(c)]

4.2.13. For the purpose of demonstrating compliance with the CO limit in Condition 4.1.13., the permittee shall calibrate, operate, and maintain an oxygen analyzer system, as defined in 40 CFR §63.11237, according to the manufacturer's recommendations and 40 CFR §63.11224(a)(7). Such system must be operated prior to the initial performance testing as required in Condition 4.3.3. Oxygen monitors must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location.

[45CSR13, R13-0622, 4.2.4., 45CSR34, 40CFR §§63.11224(a), (a)(7), and (d)]

4.2.14. The permittee shall install, calibrate, maintain, and continuously operate a fabric filter bag detection system in accordance with the following and the site-specific monitoring plan as required in Condition 4.1.17.

a. The permittee must install and operate a bag leak detection system at each outlet of control device C-4.

b. Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with EPA-454/R-98-015 (incorporated by reference, see 40 CFR §63.14).

c. The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

d. The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. The bag leak detection system must be equipped with an audible or visual alarm system that will activate automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard or seen by plant operating personnel. **[45CSR13, R13-0622, 4.2.5., 45CSR§2-8.2.a., 45CSR34, 40 CFR §§63.11224(f), 63.11201(c), Table 3, row 1]**

4.2.15. The permittee shall install, calibrate, maintain, and continuously operate a parameter monitoring system (CPMS) in accordance with the following and the site-specific monitoring plan for the oxygen analyzer, the activated carbon and dry sorbent injection systems:

a. The CPMS must complete a minimum of one cycle of operation every 15 minutes. The permittee must have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.

b. The permittee must calculate hourly arithmetic averages from each hour of CPMS data in units of the operating limit and determine the 30-day rolling average of all recorded readings, except as provided in 40 CFR §63.11221(c). Calculate a 30-day rolling average from all of the hourly averages collected for the 30-day operating period using the following equation:

$$\text{30-day average} = \frac{\sum_{i=1}^{n} Hpvi}{n}$$

Where:
Hpvi = the hourly parameter value for hour i
n = the number of valid hourly parameter values collected over 30 boiler operating days

c. For purposes of collecting data, the permittee must operate the CPMS as specified in 40 CFR §63.11221(b). For purposes of calculating data averages, the permittee must use all the data collected during all periods in assessing compliance, except that the permittee must exclude certain data as specified in 40 CFR §63.11221(c) (monitoring system malfunctions or out-of-control periods or repairs associated with monitoring system malfunctions). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in 40 CFR §63.11221(d).

d. Record the results of each inspection, calibration, and validation check.
[45CSR13, R13-0622, 4.2.6., 45CSR§13-5.11, 45CSR34, 40CFR §§63.11224(c) and (d)]

4.3. Testing Requirements

4.3.1. Tests shall be conducted, or have been conducted to determine the compliance of boiler 001 particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. The most recent compliance test, at the time of the issuance date of this permit, was conducted on June 28, 2016 and the test results were between 50% and 80% of the weight emission standard. Therefore the testing frequency is "Once/2 years." The next compliance test shall be conducted no later than June 28, 2018. Subsequent testing shall be based on the schedule below.

Test	Test Results	Testing Frequency
Annual	After three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	After two successive tests indicate mass emission rates between 50% and 80% of weight emission standard	Once/2 years
Annual	Any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	After two successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Once/2 years	Any tests indicates a mass emission rate between 50% and 80% of weight emission standard	Once/2 years
Once/2 years	Any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/3 years	Any tests indicates a mass emission rate ≤50% of weight emission standard	Once/3 years
Once/3 years	Any test indicates mass emission rates between 50% and 80% of weight emission standard	Once/2 years
Once/3 years	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual

[45CSR§2-8.1., 45CSR§2A-5.2., 45CSR2 & 10 Monitoring Plan §A.4.a.]

4.3.2. Tests shall be conducted, or have been conducted, to determine compliance of Boiler 001 sulfur dioxide mass emission limitations. Such tests shall be conducted in accordance with the 40 CFR Part 60, Appendix A, Method 6 or other equivalent EPA testing method approved by the Secretary. The most recent compliance test, at the time of the issuance date of this permit, was conducted on June 28, 2016 and the test results were ≤50% of factor. Subsequent re-testing shall be based on the schedule below.

% of Factor*	Testing Frequency
≤ 50% of factor	No stack testing required
Between 50% and 90% of factor	Once/5 years
≥ 90% of factor	Once/year

*For Boiler 001, the factor equals 358.4 lb/hr SO_2

[45CSR§10-8.1., 45CSR§10A-5.1., 45CSR2 & 10 Monitoring Plan §B.1.a.]

4.3.3. Testing shall determine compliance with the CO limit of Condition 4.1.13., PM limit of Condition 4.1.6., visible emissions limit of Condition 4.1.3., the HCl limit of Condition 4.1.12. and mercury limit of Condition 4.1.14. and establish operating limits for the oxygen content, injection of activated carbon and dry sorbent as required in Conditions 4.1.15. and 4.1.16. This testing shall be conducted in accordance with 45 CSR2 Appendix, Row 2 of Table 4 to 40 CFR 63, Subpart JJJJJJ, U.S. EPA Method 29 for HCl, and Condition 3.3.1.

The permittee must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for mercury and HCl emissions, and the permittee must demonstrate initial compliance and establish operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, the permittee must comply with the operating limit for operating load conditions specified in Table 3 of 40 CFR 63, Subpart JJJJJJ.

The permittee must conduct a minimum of three separate test runs for each performance stack test required in this section, as specified in 40 CFR §63.7(e)(3) and in accordance with the provisions in Table 4 to Subpart JJJJJJ.

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to Part 60 of this chapter to convert the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates.
[45CSR13, R13-0622, 4.3.1., 45CSR§§2-8.1.a. & b., 45CSR34, 40CFR §§63.11210(a) and (i), 63.11212, Table 4 to 40 CFR 63, Subpart JJJJJJ – Performance (Stack) Testing Requirements]

4.3.4. On a triennial basis after completion of the initial testing performed on June 28, 2016, the permittee shall conduct subsequent testing to demonstrate compliance with the CO and mercury limits in Conditions 4.1.13. and 4.1.14. Such testing shall be conducted no more than 37 months after the previous performance test and in accordance with applicable procedures and methods as outlined in Conditions 3.3.1. and 4.3.3.
[45CSR13, R13-0622, 4.3.2., 45CSR34, 40CFR §63.11220(a)]

4.3.5. Within 60 days after the date of completing each performance test for mercury as required by Conditions 4.3.3. or 4.3.4., the permittee must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office. Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the permittee must also submit these reports, including CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator at the appropriate address in 40 CFR §63.13.
[45CSR13, R13-0622, 4.3.3., 45CSR34, 40CFR §63.11225(e)(1)]

4.4. Recordkeeping Requirements

4.4.1. Records of all required monitoring data as established in the 45CSR2 and 45CSR10 monitoring plan, incorporated into Section 4.2. of this permit, and the 40 CFR 64 CAM plan, including the operating schedule and the quantity and quality of fuel consumed in boiler 001, shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request. Such records shall include but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily and monthly basis and the ash, BTU and sulfur analysis for each coal shipment.
[45CSR§30-5.1.c., 45CSR§§2-8.3.a. & c., 45CSR§§10-8.3.a. & c., 45CSR2 & 10 Monitoring Plan §§A.3.a. & c. and A.4.b., 40 CFR §64.9(b)]

4.4.2. For the purpose of demonstrating compliance with the average sulfur content limit specified in condition 4.1.8., records of the weighted average sulfur content of all shipments of coal received shall be maintain on site. Such records shall be kept on a rolling monthly basis. The average percent sulfur content shall be calculated for each calendar year.
[45CSR§30-5.1.c.]

4.4.3. **Record of Maintenance of Air Pollution Control Equipment**. For all pollution control equipment listed in Condition 4.1.21., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-0622, 4.4.2.]

4.4.4. **Record of Malfunctions of Air Pollution Control Equipment**. For all air pollution control equipment listed in Condition 4.1.21., the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.
f. Steps taken to correct the malfunction.
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-0622, 4.4.3.]

4.4.5. The permittee shall keep the following records in accordance with 40 CFR §63.11223(b)(6).

a. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler using a portable combustion analyzer.

b. A description of any corrective actions taken as part of the tune-up; and

c. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

[45CSR13, R13-0622, 4.4.4., 45CSR34, 40 CFR §63.11223(b)]

4.4.6. The permittee must keep the records information specified in the following:

a. As required in 40 CFR §63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted.

b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 and 40 CFR §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of 40 CFR §63.11225.

c. Records must identify each boiler, the date of initial tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

d. The permittee must keep a copy of the energy assessment report.

e. The permittee must also keep records of monthly fuel (coal) used by the boiler, including the type(s) of fuel and amount(s) used.

f. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

g. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

h. The permittee must keep the records of all inspection and monitoring data required by Conditions 4.2.13., 4.2.14., and 4.2.15. (40 CFR §§63.11221 and 63.11222), and the information identified in 40 CFR §§63.11225(c)(6)(i) through (vi) for each required inspection or monitoring.

i. For the bag leak detection system, the permittee must keep the following records:

i. Records of the bag leak detection system output.

ii. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.

iii. The date and time of all bag leak detection system alarms, and for each valid alarm, the time the permittee initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

[45CSR13, R13-0622, 4.4.5., 45CSR34, 40 CFR §63.11225(c), 45 CSR §2-8.3.c., & 45 CSR §10-8.3.c.]

4.5. Reporting Requirements

4.5.1. A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and /or CAM plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§30-5.1.c., 45CSR§2-8.3.b. 45CSR§10-8.3.b., 40 CFR §64.9(a)]

4.5.2. Any malfunction of boiler 001 or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in 45CSR§§2-3 and 4) shall be reported to the Director as provided in one of the following:

a. Excess opacity periods resulting from any malfunction of boiler 001 or its air pollution control equipment, meeting the following conditions, may be reported on a quarterly basis unless otherwise required by the Secretary:

1. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and

2. Excess opacity does not exceed forty percent (40%).

b. Except as provided in permit condition 4.5.2.a. above, the owner or operator shall report to the Secretary by telephone, telefax, or e-mail any malfunction of boiler 001 or its associated air pollution control equipment, which results in any excess particulate matter or excess opacity, by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Secretary within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date, and time of duration (with starting and ending times) of the period of excess emissions;

3. An estimate of the mass of excess emissions discharged during the malfunction period;

4. The maximum opacity measured or observed during the malfunction;

5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.]

4.5.3. The permittee shall submit "Annual Compliance Reports" to the Director for the boiler with the first report being submitted by no later than March 15, 2017 and subsequent reports due every March 15 from thereafter for the previous calendar year. Such reports shall contain the information specified in 40 CFR §§63.11225(b)(1) through (4) which are:

a. Permittee and facility name, and address;

b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The permittee notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official.

i. "No secondary materials that are solid waste were combusted in any affected unit."

ii. "This facility complies with the requirement in 40 CFR §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

d. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the permittee or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.

[45CSR13, R13-0622, 4.5.2., 45CSR34, 40CFR §63.11225(b)]

4.5.4. The permittee shall submit quarterly visible emission report to the Director. Such reports shall be post marked 30 days of the end of the quarter. This report shall identify any instance that a visible emission observation indicated an exceedance of the standard in Condition 4.1.3. A description of the excursion or cause of the exceedance, any corrective action taken, and the beginning and ending times for the exceedance shall be included in the report.

To the extent that an exceedance is due to a malfunction, the reporting requirement of 45 CSR §2-9.3. shall be followed.

In the event that no exceedance of the standard occurred or that no observations were taken, the permittee shall state that in the report. Such reports shall be submitted in accordance with Condition 3.5.1.

[45CSR13, R13-0622, 4.5.3., 45 CSR §2A-7.2c.]

4.6. Compliance Plan

4.6.1. Not Applicable.

5.0. Paperboard Mill, Carpenter Shop [emission point ID(s): *PM-1, PM-2*]

5.1. Limitations and Standards

5.1.1. Emissions of smoke and/or particulate matter from any process source operation (*PM-1, PM-2*) shall not exceed twenty (20) percent opacity.
[45CSR§7-3.1.]

5.1.2. The provisions of 45CSR§7-3.1 (condition 5.1.1. above) shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2.]

5.1.3. Particulate emissions from the paperboard mill *(PM-1)* shall not exceed 14.0 pounds per hour.
[45CSR§7.4.1.]

5.2. Monitoring Requirements

5.2.1. Compliance with the visible emission requirements for the process source operations (*PM-1*) shall be determined by conducting monthly Method 22-like visible emission checks. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40 CFR Part 60, Appendix A, Method 9 certification course.

The visible emission check shall be performed during periods of normal facility operation and appropriate weather conditions and for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present.

If visible emissions are present during these checks or at any other time, compliance shall be determined by conducting tests in accordance with 45CSR§§7A-2.1.a. and 2.1.b.
[45CSR§7A-2.1., 45CSR§30-5.1.c.]

5.2.2. The permittee shall monitor all applicable control devices to ensure that they are operated and maintained according to manufacturer's specifications to ensure the lowest fugitive particulate emissions reasonably achievable.
[45CSR§30-5.1.]

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain records of all monitoring data required by 5.2.1. above documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal

for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR§30-5.1.c.]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. Not Applicable.

6.0. Emergency Generator [emission point ID(s): *EMG-1*]

6.1. Limitations and Standards

6.1.1. If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to 40 CFR 63 subpart ZZZZ which apply to you.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2]Sources have the option to utilize an oil analysis program as described in Condition 6.2.4 in order to extend the specified oil change requirement in Table 2c of this subpart.

[45CSR34, 40 CFR § 63.6602 and Table 2c, Condition 1. of 40 CFR 63 Subpart ZZZZ]

6.1.2. a. You must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63 Subpart ZZZZ that apply to you at all times.

b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34, 40 CFR § 63.6605]

6.1.3. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs 1. through 3. below. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1. through 3. below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 1. through 3. below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary RICE in emergency situations.

2. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs i. through iii. of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 3. below counts as part of the 100 hours per calendar year allowed by this paragraph.

   i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

   ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

   iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2. above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34, 40 CFR § 63.6640(f)]

6.2. Monitoring Requirements

6.2.1. If you own or operate an existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
[45CSR34, 40 CFR § 63.6625(e)(1)]

6.2.2. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
[45CSR34, 40 CFR § 63.6625(f)]

6.2.3. If you operate an existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not

to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Section 6.1.1. apply.
[45CSR34, 40 CFR § 63.6625(h)]

6.2.4. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in Section 6.1.1., you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in Section 6.1.1. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
[45CSR34, 40 CFR § 63.6625(i)]

6.3. Testing Requirements

6.3.1. None.

6.4. Recordkeeping Requirements

6.4.1. You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you. You must demonstrate continuous compliance by:

i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34, 40 CFR §§63.6655(d), 63.6640(a), and Table 6, Condition 9. of 40 CFR 63, Subpart ZZZZ]

6.4.2. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
[45CSR34, 40 CFR § 63.6655(e)]

6.4.3. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii)

or 40 CFR §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
[45CSR34, 40 CFR §§ 63.6655(f) and (f)(1)]

6.5. Reporting Requirements

6.5.1. You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2c to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in Condition 6.5.2.
[45CSR34, 40 CFR §§ 63.6640(b)]

6.5.2. a. For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs b.1. through 4. below and the information in paragraphs a.1. and 2. of this section.

1. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

2. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

b. The Compliance report must contain the information in paragraphs below.

1. Company name and address.

2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

3. Date of report and beginning and ending dates of the reporting period.

4. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Condition 6.1.9.b, including actions taken to correct a malfunction.

[45CSR34, 40 CFR §§63.6650(d) and (c)]

6.5.3. You must submit all of the notifications in 40 CFR §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.
[45CSR34, 40 CFR §§ 63.6645(a) and (a)(1)]

6.6. Compliance Plan

6.6.1. None.

Naval Sea Systems

54-057-00011

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West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13- 3186

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Alliant Techsystems Operations LLC
Allegheny Ballistics Laboratory
057-00011

William F. Durham
Director

Issued: August 12, 2014

NON-CONFIDENTIAL

Facility Location:	210 State Route 956 Rocket Center, Mineral County, West Virginia 26726
Mailing Address:	Same As Above
Facility Description:	Development and Manufacturing Facility
NAICS Codes:	336415
UTM Coordinates:	686.5 km Easting • 4,381.3 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	The applicant proposed to replace Steam Plant #1 with ten (10) new natural gas-fired boilers (aggregate heat input of 120 MMBtu/hr).

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Table of Contents

1.0. Emission Units **4**
2.1. Definitions 5
2.2. Acronyms 5
2.3. Authority 6
2.4. Term and Renewal 6
2.5. Duty to Comply 6
2.6. Duty to Provide Information 6
2.7. Duty to Supplement and Correct Information 6
2.8. Administrative Update 7
2.9. Permit Modification 7
2.10 Major Permit Modification 7
2.11. Inspection and Entry 7
2.12. Emergency 7
2.13. Need to Halt or Reduce Activity Not a Defense 8
2.14. Suspension of Activities 8
2.15. Property Rights 8
2.16. Severability 8
2.17. Transferability 9
2.18. Notification Requirements 9
2.19. Credible Evidence 9

3.0. Facility-Wide Requirements **10**
3.1. Limitations and Standards 10
3.2. Monitoring Requirements 10
3.3. Testing Requirements 10
3.4. Recordkeeping Requirements 11
3.5. Reporting Requirements 12

4.0. Source-Specific Requirements **14**
4.1. Limitations and Standards 14
4.2. Monitoring Requirements 16
4.3. Testing Requirements 17
4.4. Recordkeeping Requirements 17
4.5. Reporting Requirements 18

APPENDIX A **20**

CERTIFICATION OF DATA ACCURACY **21**

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
L-23S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-24S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-25S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-26S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-27S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-28S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-29S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-30S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-31S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
L-32S	L-8E or L-9E	Boiler, NG with Diesel back-up (Miura EXN-300SGOF)	2015	12 MMBtu/hr	None
EG-13	EG-13	Generator Set (Emergency Use) (Kohler 700 REOZDE) w/Diesel Engine	2015	750 kW/1046 Bhp	None
M-28S	N/A	Storage Vessel (Ultra-Low Sulfur Diesel)	2015	30,000 gallons	None

L-8E is the economizer stack.
L-9E is the by-pass stack around the economizer.

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
dscm	Dry Standard Cubic Meter
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MDHI	Maximum Design Heat Input
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 μm in diameter
PM_{10}	Particulate Matter less than 10μm in diameter
Ppb	Pounds per Batch
Pph	Pounds per Hour
Ppm	Parts per Million
Ppm_V or ppmv	Parts per Million by Volume
PSD	Prevention of Significant Deterioration
Psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquids

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3186, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly

authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to all boilers listed in Table 1.0 of this permit:

a. Each boiler shall be fired with "pipeline quality natural gas" at all times except when conducting periodic testing, and readiness checks of the boilers' ability to fire on liquid fuel (distillate oil); during periods of natural gas curtailment; or gas supply emergencies. The duration of such periodic testing and/or readiness check shall not exceed more than 48 hours per year for each boiler.

b. The total release of CO through emission points E01 and E02 shall not exceed 9.4 pounds per hour on a combined total basis.

c. The total release of NO_x through emission points E01 and E02 shall not exceed 4.6 pounds per hour on a combined total basis.

d. The maximum sulfur content of the distillate oil to be fired in the boilers shall not exceed 0.0015 percent weight or 15 ppm by weight. The use of ultra-low sulfur diesel as the distillate oil in these boilers satisfies this limit.
[45 CSR §10-3.3.f., and 40 CFR §60.42c(d)]

e. At times when the boiler(s) is fired entirely with natural gas, this operating condition satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.3.f.
[45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]

f. At all times when each affected emission unit is operated on distillate oil or any combination of distillate oil and natural gas, the unit shall not exhibit visible emissions greater than 10% opacity on a six minute block average. Compliance shall be verified in accordance with Condition 4.2.2. of this permit.

g. Each boiler shall not have a maximum heat input in excess of 12 MMBtu/hr and aggregated total from all ten boilers of no greater than 120 MMBtu/hr of heat input. Compliance with this limit shall be satisfied by limiting the aggregated total annual heat input to 1,051,200 MMBtu per year.
[45CSR§2-3.1.]

4.1.2. The permittee shall conduct the initial tune-up and subsequent tune-ups for each boiler listed in Table 1.0 of this permit in accordance with the following timing and tune-up requirements:

a. The initial tune up for each boiler shall be completed no later than 13 months after initial start-up of each affected unit respectively.
[40 CFR §63.7510(g) & §63.7490(b)]

b. Subsequent tune-ups for each boiler shall be completed no later than 13 months after the previous tune-up.
[40 CFR §63.7515(d), §63.7540(a)(10)]

c. Each tune-up shall consist of the following:

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit

shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications of 100 ppm at 3% oxygen, which includes the manufacturer's NOx concentration specification of 30 ppm at 3% oxygen;

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR §63.7500(a)(1), §63.7505(a), §63.7515(d), §63.7540(a)(10), and Table 3 to Subpart DDDDD of Part 63—Work Practice Standards]

4.1.3. The following conditions and requirements are specific to generator set identified as EG-13:

a. The generator set shall be used as an emergency stationary generator and be limited to non-emergency operation of no more than 100 hours per year. Non-emergency operation shall be for maintenance checks and readiness testing. Emergency operation is defined when electric power from the local utility is interrupted.
[40 CFR §60.4211(f)]

b. The generator set shall be equipped with an engine or engine configuration that has been certified by the manufacturer to comply with either 40 CFR §60.4205(b)(2), which referred to 40 CFR §§89.111 and 112 or 40 CFR Part 60.
[40 CFR §§60.4211(a)(3) and (c)(1)]

c. The permittee shall maintain the engine of the generator set according to the manufacturer's emission-related written instructions.
[40 CFR §60.4211(a)(1)]

d. The permittee shall only change those emission-related settings of the generator sets that are permitted by the manufacturer.
[40 CFR §60.4211(a)(2)]

e. The generator set is permitted as a compression ignition engine which is operated on diesel. The maximum name plate power output of the engine shall not be greater than 1,046 Bhp.

f. The engine will be equipped with a non-resettable hour meter.

4.1.4. Diesel fuel used by the engine for the generator set shall have a maximum sulfur content no greater than 15 ppm (ultra-low sulfur diesel) and with either a minimum centane index of 40 or a maximum aromatic content of 35 volume percent. Diesel meeting the specifications of Nonroad diesel under 40 CFR §80.510(b) is equivalent. The boilers may be fired with the diesel meeting

this requirement, which satisfies compliance the sulfur content limit in item d of Condition 4.1.1. **[40 CFR §§60.42c(d), 40 CSR §10-3.3.f., 40 CFR §60.4207(b)]**

4.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. For each month, the permittee shall record the amount of fuel by type (natural gas and diesel) consumed by the boilers and shall calculate the combined total heat input for boilers on a rolling 12 month total. In lieu of monthly diesel fuel usage records, records of distillate oil (diesel) delivered to the facility must be kept, which include the date and quantity delivered. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.
[40CFR§60.48c(g)(2), 40CFR§63.7540(a)(10)(vi)(C), 45 CSR §2-8.3.c., and 45CSR§2A-7.1.a.1.]

4.2.2. When any boiler covered by this permit is operated using any amount of distillate oil (diesel) for more than 30 consecutive operating days, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping of the corresponding emission point of the associated boiler that is subject to the visible emission standard of Condition 4.1.1.(d). after the 30th consecutive operating days and no later than the 45 consecutive days. Once the boiler is switched back to 100% natural gas, the counting of 30 consecutive operating days shall reset to zero and not resume counting until the unit being to consume distillate oil (diesel) again.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once every forty-five (45) days when the boiler is being fired with distillate oil. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of METHOD 9 as soon a practicable, but within seventy-two (72) hours of the final visual emission check. A METHOD 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

4.2.3. For the purpose of demonstrating compliance with the periodic testing, and readiness checks limitation of Condition 4.1.1.a. The permittee shall record the length time and date that periodic testing, and readiness checks of the liquid fuel delivery system is conducted for each boiler (i.e.

when the boiler is operating on diesel for readiness checks) as allowed in Condition 4.1.1.a. of this permit. Such records shall be maintained in accordance with Condition 3.4.1.

4.2.4. For the purpose of demonstrating compliance with the hours of operation limit in Condition 4.1.3., the permittee shall record the number of hours each generator set operated for non-emergency situations during the calendar month and the reason for such operation. Such records shall be maintained in accordance with Condition 3.4.1.
[40 CFR §60.4211(f)]

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. The permittee shall keep the following records in accordance with 40CFR§63.7555. This includes but is not limited to the following information during the tune-up as required in Condition 4.1.2. and 40 CFR §63.7540:

a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. If concentrations of NO_x were taken during the tune-up of the unit, record of such measurements shall be included; and

b. A description of any corrective actions taken as a part of the tune-up.
[40 CFR §§63.7540(a)(10)(vi) and 63.7555]

4.4.5. The permittee shall maintain the following records in accordance with Condition 3.4.1. of this permit:

a. The name of the diesel supplier;

b. A statement from the diesel supplier that the fuel complies with the specification under the definition of distillate oil in 40CFR§60.41c; and

c. Sulfur content or maximum sulfur content of the diesel supplied.
[40CFR§60.4848c(f)(1) and 45CSR§10-8.3.a.]

4.4.6. The permittee shall maintain records of all monitoring data required by Condition 4.2.2. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in METHOD 9, the data records of each observation shall be maintained per the requirements of METHOD 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.

4.5. Reporting Requirements

4.5.1. The permittee shall submit an "Initial Notification" to the Director of the initial start-up of boilers within 15 days after the actual date of start-up. This Initial Notification supersedes the notification requirements of Condition 2.18.
[40CFR§§60.48c(a) and 40CFR§§60.7]

4.5.2. The permit shall include with the facility's Title V Compliance Report a compliance report for the boilers with regards to complying with the sulfur limit in (item d. of Condition 4.1.1.) Subpart Dc to Part 60. Such reports shall cover the six month period of January to June and July to December for the diesel fuel consumed by the boilers or delivered to the facility during the reporting period. These reports shall include the records required in Condition 4.4.5. and a certified statement

signed by the permittee that the records of fuel supplier certifications submitted represent all of the diesel combusted during the reporting period.
[40CFR§§60.48c(d), (e)(11), (f)(1) and (j)]

4.5.3. The permittee shall submit "Annual Compliance Reports" for the all of the boilers electronically using CEDRI that is accessed through the EPA's Center Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form for this report is not available in CEDRI at the time the report is due, the permittee shall submit the report to the Administrator and Director using the addresses listed in Condition 3.5.3. The first compliance period beginning at the initial startup of the boiler and ending on the January 31. Subsequent reporting periods are annual on a calendar basis thereafter. Such reports shall are due no later than January 31 and shall contain the information specified in 40 CFR §§63.7550(c)(5) (i)through (iv) and (xiv) which are:

a. Permittee and facility name, and address;

b. Process unit information, emission limitations, and operating limitations;

c. Date of report and beginning and ending dates of the reporting period;

d. The total operating time during the reporting period of each affected unit;

e. Include the date of the most recent tune-up for each boiler; and

f. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

The permittee shall maintain records of such reports in accordance with Condition 3.4.1.
[40CFR §§63.7550(b), (b)(1), (c)(1), & (c)(5)(i) though (iv) and (xiv), and (h)(3)]

4.5.4. Any exceedance(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the exceedance(s), and any corrective measures taken or planned.

APPENDIX A

Date of Observation: _____

Data Entered by: _____

Reviewed by: _____

Date Reviewed: _____

Describe the General Weather Conditions:

Emission Point ID	Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Months of Visual Emissions	Comments

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

   (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

   (ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

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west virginia department of environmental protection

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Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION/FACT SHEET

B ACKGROUND INFORMATION

Application No.:	R13-3186
Plant ID No.:	057-00011
Applicant:	Alliant Techsystems Operations LLC (ATK)
Facility Name:	Allegany Ballistics Laboratory (ABL)
Location:	Rocket Center
NAICS Code:	3364115
Application Type:	Modification
Received Date:	April 21, 2013
Engineer Assigned:	Edward S. Andrews, P.E.
Fee Amount:	$4500.00
Date Received:	April 29, 2014
Complete Date:	May 28, 2014
Due Date:	August 15, 2014
Applicant Ad Date:	May 17, 2014
Newspaper:	*News Tribune*
UTM's:	Easting: 686.5 km Northing: 4,381.2 km Zone: 17
Description:	The application is for the replacement of Steam Plant #1 with ten natural gas fired boilers that are equipped with distillate oil as back-up supply source.

DESCRIPTION OF PROCESS

The principal operations at the Rocket Center facility consist of the fabrication of rocket motor and warhead cases; the production of propellants and explosives which are loaded into above cases; preparation of cases; and, examination of motors. Currently, steam at the facility is provided by existing boilers, which combust coal and distillate oil to indirectly transfer heat to the other processes at the facility. ATK proposes to install ten (10) new efficient natural gas-fired boilers, with distillate oil as back-up fuel; and, once the new boilers are operational, ATK proposes to decommission the existing boilers. The proposed project will also include installing one (1) new emergency generator for the new boilers and one (1) new oil storage tank.

Proposed New Equipment – Natural Gas-fired Boilers

ATK proposes to install ten natural gas-fired boilers as part of the repowering project, where eight are expected to operate during the cooler months, three to operate during the warmer months, and two to operate as backup. Each boiler will have a maximum heat input capacity of up to 12 MMBtu/hr and will be designed without a continuous oxygen trim system for rapid start-up to to meet three load scenarios: full, half, and none.

The ten boilers will be configured in two rows of five units and will have a shared condensing economizer. Air emissions from each boiler exhaust into ductwork and exit through one of two points: the common stack or the economizer stack. By design, all of the boiler emissions will exit year round through the economizer stack. If the economizer is down for maintenance, emissions will exit through the common stack.

ATK requires backup fuel because an unexpected natural gas curtailment or supply interruption would lead to potential material explosions as the material temperature and pressure would change without a constant steam load. As such, ATK will include the ability to combust ultra-low sulfur diesel (ULSD) in each of the new boilers during curtailment periods. ATK proposes to combust ULSD for each boiler for no more than 48 hours per calendar year during specified periods of maintenance, training, and testing.

Proposed New Equipment – Emergency Generator

ATK also proposes to install an emergency engine-driven generator, which would supply emergency power for the proposed ten natural gas-fired boilers. The emergency generator will have a maximum power capacity of 750 kilowatts (kW) and will fire ULSD as fuel. ATK proposes to operate the engine without a time limit during emergency situations and to limit the number of annual hours of operation for periodic maintenance and testing.

Proposed New Equipment – ULSD Storage Tank

ATK proposes to install one new ULSD storage tank to service the boilers and emergency generators, and it will have a maximum capacity of approximately 30,000 gallons.

Proposed Equipment to Cease Operation

ATK currently operates one coal-fired boiler (No. 17) and two distillate oil-fired boilers (No. 15 and 16), where one of the three boilers is always in operation, another is operated for swing loads, and the other is used only as back-up during maintenance or shutdown of the other boiler(s) as Steam Plant #1. ATK also operates other associated equipment related to coal fuel and coal ash. The total nominal heat input rating for the three existing boilers is approximately 210 MMBtu/hr. Upon completion of the repowering project, all three coal- and oil-fired boilers and all associated coal-related equipment will be shut down and permanently removed from service.

SITE INSPECTION

On May 22, 2014, Mr. Karl Dettinger, a Compliance Inspector assigned to the Compliance and Enforcement Section of the DAQ, conducted a part of his full-on- site inspection of the Allegany Ballistics Laboratory. At this time, Mr. Dettinger is evaluating his findings to determine if the laboratory is operating in compliance with all rules, regulations and permits. Mr. Dettinger did not see any issues related to the installation of these proposed units at the Allegany Ballistics Laboratory.

ESTIMATE OF EMISSION BY REVIEWING ENGINEER

The applicant used pollutant specific emissions factors from Chapters 1.4 (natural gas fired) and 1.3 (oil fired) of AP-42, filterable & condensable fractions of particular mater from data published by U.S. EPA Region V, and manufacturer's data to estimate emissions from the new boilers. All ten of the proposed boilers are to be identical. The manufacturer provided carbon monoxide (CO) and oxides of nitrogen (NO_x) concentrations for firing with both types of fuel corrected to 3% oxygen, which is 100 ppm for CO and 30 ppm for NO_x. The potential emissions using natural gas is presented in the following table:

Table #1 – Emission from One of the New Boilers using Natural Gas

Pollutant	Emission Factor	Hourly Rate (lb/hr)	Annual Rate (tpy)
PM Filterable/Condensable Fractions	0.52 lb/MMcf	0.01	0.01
PM_{10} Filterable/Condensable Fractions	0.52 lb/MMcf	0.01	0.01
$PM_{2.5}$ Filterable/Condensable Fractions	0.33 lb/MMcf	0.004	0.003
Sulfur Dioxide (SO_2)	0.6 lb/MMcf	0.006	0.01
Oxides of Nitrogen (NO_x)	0.036 lb/MMBtu	0.43	0.72
Carbon Monoxide (CO)	0.074 MMBtu	0.89	0.82
Volatile Organic Compounds (VOCs)	5.5 lb/MMcf	0.06	0.05
Total Hazardous Air Pollutants (HAPs)	1.9 lb/MMscf	0.02	0.09
Carbon Dioxide Equivalent* (CO_2e)	117.098 lb/MMBtu	1,405.18	6154.69

* Based on factors and global warming potentials from Tables A-1, C-1, and C-2 of Part 98 published on Federal Register on November 29, 2013.

The emissions from the use of the distillate oil were estimated using emission factors from Chapters 1.3 (oil fired) of AP-42. Sulfur dioxide emissions were based on 0.0015 % sulfur content by weight.

Table #2 – Emission from One of the New Boilers using Distillate Oil			
Pollutant	**Emission Factor**	**Hourly Rate (lb/hr)**	**Annual Rate (tpy)**
PM Filterable/Condensable Fractions	3.3 lb/Mgal	0.29	0.07
PM_{10} Filterable/Condensable Fractions	2.3 lb/Mgal	0.20	0.05
$PM_{2.5}$ Filterable/Condensable Fractions	1.55 lb/Mgal	0.14	0.04
Sulfur Dioxide (SO_2)	0.213 lb/Mgal	0.02	0.01
Oxides of Nitrogen (NO_x)	0.0384	0.46	0.12
Carbon Monoxide (CO)	0.0779 lb/MMBtu	0.93	0.23
Volatile Organic Compounds (VOCs)	0.2 lb/Mgal	0.02	0.01
Total Hazardous Air Pollutants (HAPs)	5.4E-01	0.047	0.012
Carbon Dioxide Equivalent* (CO_2e)	163.61 lb/MMBtu	1,963.32	490.83

* Based on factors and global warming potentials from Tables A-1, C-1, and C-2 of Part 98 published on Federal Register on November 29, 2013.

Annual emissions are based on continuous operation of the units. Worst case potential emissions when operating on fuel oil is based on 500 hours per year. The following table is the worst case annual potential from all ten boilers and the potential from Steam Plant #2.

Table #3 – Annual Emission from the Boilers			
Pollutant	**Annual Potential 10 proposed boilers (tpy)**	**Potential of Steam Plant #2 (tpy)**	**Potential Both Steam Plants(tpy)**
PM	1.11	0.16	1.27
PM_{10}	0.91	0.08	0.99
$PM_{2.5}$	0.57	0.07	0.64
SO_2	0.35	2.61	2.96
NO_x	18.96	7.73	26.69
CO	39.06	7.16	46.22
VOCs	2.58	0.47	3.05
HAPs	0.946	0.25	1.196
CO_2e	62942.23	10,427	73,369.23

Potential emissions from the engine for the emergency generator set were based on a manufacturer certified engine meeting the emission standard using ultra-low sulfur diesel. Annual emissions were based on 500 hours per year of operation. These emissions are summarized in the following table:

Table #4 – Emission from Generator Set		
Pollutant	**Hourly Rate (lb/hr)**	**Annual Rate (tpy)**
PM Filterable/Condensable Fractions	0.34	0.09
PM_{10} Filterable/Condensable Fractions	0.34	0.09
$PM_{2.5}$ Filterable/Condensable Fractions	0.34	0.09
Sulfur Dioxide (SO_2)	1.11E-4	<0.01
Oxides of Nitrogen (NO_x)	11.02	2.76
Carbon Monoxide (CO)	6.03	1.51
Volatile Organic Compounds (VOCs)	0.66	0.01
Total Hazardous Air Pollutants (HAPs)	1.14E-02	0.17
Carbon Dioxide Equivalent* (CO_2e)	1,197.63	299.41

The VOC emissions from the storage tank working and breathing losses were predicted to be 1.77 pounds per year using TANKS 4.09d.

The emissions from Steam Plant #1 were not estimated as part of this evaluation. As discussed in the following section, the potential emission increase of this project and the recent changes made in Steam Plant #2 does not exceed the significance threshold of a major modification of a major source for any of the New Source Review Pollutants.

REGULATORY APPLICABLILITY

The Allegany Ballistics Laboratory is a major source under Title V (45CSR30) and currently possesses a valid Title V Operating Permit. The facility is currently classified as a major source under Prevention of Significant Deterioration (PSD) and for HAPs.

Major Modification Test of the Project

The first step in determining major modification applicability is to determine which pollutants that the project is major for, which is illustrated in the following table.

Table #2 Step One of PSD Applicability

Pollutant	Increase in Potential from the proposed project (tpy)	Significance Threshold (tpy)	Significance Trigger (Yes/No)
PM	1.11	25	No
PM_{10}	0.91	15	No
$PM_{2.5}$ Direct	0.57	10	No
SO_2	0.35	40	No
NO_x (precursor of Ozone and $PM_{2.5}$)	18.96	40	No
CO	39.06	100	No
VOCs	2.58	40	No
CO_2 equivalent (CO_{2e})	62942.23	75,000	No

This project does not represent a "significant emission increase" (45CSR§14-2.75) for any NSR pollutant. Thus, no further review is required.

With regards to the National Ambient Air Quality Standards, Mineral County is classified as attainment for all pollutants. Thus, no further review of this application with regards to 45 CSR 19, West Virginia Non-Attainment Permitting Rule is required.

Boilers

The new boilers are subject to Rules 2 & 10 (WV State Rules on PM and SO_2). Under 45 CSR §2-4.1, the proposed ten boilers, i.e. Type "b" fuel burning units, are subject to a weight emission standard in pounds per hour (lb/hr) of PM, calculated as the product of 0.09 lb of PM per MMBtu and the total heat inputs for such units in MMBtu/hr (i.e. 0.09 x 120 = 10.8), where no more than 600 lb/hr may be discharged into the open air from all such units. The hourly potential from all 10 boilers using distillate oil would only be 2.9 pounds per hour and 0.1 pounds per hour using natural gas. During the worst case operation (distillate oil firing mode), the potential from all 10 boilers would only be 27% of the applicable limit under Rule 2. The distillate oil firing mode will be limited to 48 hours per year and the duration of any natural gas curtailments.

These units will be subject to the 10% visible emission standard of 45 CSR §2-3.1. Both of the proposed fuels are fairly clean (low ash content) fuel and typically exhibit little to no visible emissions when burned in a properly operated and maintained boiler. Without the use of an add-on-control device, the proposed boilers should easily meet the requirements of Rule 2.

The proposed boilers are over 10 MMBtu and thus are subject to Subpart Dc of Part 60. The sulfur dioxide limitations of Subpart Dc are more stringent then Rule 10. Therefore, no further discussion of Rule 10 is needed.

The purposed boilers will burn distillate oil, which Subpart Dc established sulfur dioxide limitations for such units in 40 CFR §60.42c(d). §60.42c(d) established a sulfur dioxide emission limit of 0.50 lb per MMBtu and an alternative sulfur content limit of 0.50 percent by weight for the oil consumed. ATK proposed to use ultra-low sulfur diesel as the distillate oil, which has a maximum concentration of sulfur of 15 ppm (0.0015 % by wt.). Thus, the proposed boilers will be capable of complying this with standard.

The established emission standards in Subpart Dc exclude units using natural gas. However, the fuel recordkeeping requirement in §60.48c(g)(2) is applicable for both fuels.

The facility is currently classified as a major source of HAPs, which means the facility has the potential to emit 10 tons per year of a single HAP, or 25 tpy of total HAPs. Within the application, ATK has not elected to determine if this project would change the facility's major source status for HAPs. Thus, these boilers are subject to 40 CFR 63, Subpart DDDDD – National Emission Standard for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial Commercial, and Institutional Boilers and Process Heaters.

Because ATK has elected to only use distillate as a back-up fuel to the natural gas for these boilers, the proposed boilers fall under the "Gas 1" category unit. These units will be limited to operate for only 48 hours per year on distillate oil for the purpose of conducting testing and readiness checks. During periods of natural gas curtailments or supply shortages, the units can be operated on distillate oil for the entire period of the curtailment or until supplies have been restored.

This regulation establishes work practices as a means to comply with the emission standards (see Item 2 of Table 3 to Subpart DDDDD of Part 63). This tune-up requirement is applicable to the replacement boiler and must be conducted in accordance with 40 CFR §63.7540 and be conducted annually. According to 40 CFR §63.7510(g) and §63.7515(d), the initial tune-up for these new units must be completed within 13 months after initial start-up. ATK will be required to conduct subsequent tune-ups every 13 months from the previous tune-up.

Emergency Generator

The proposed emergency generator is subject to Subpart IIII of Part 60 because it is a stationary compression ignition (CI) reciprocating internal combustion engine (RICE), will be manufactured after April 1, 2006, and is not a fire pump engine.

Subpart IIII has specific requirements based on several criteria, including model years and engine displacements. Because the generator is a 2014 model year emergency generator CI ICE10 with a displacement less than 30 liters per cylinder, per 40 CFR §60.4205(b) and 40 CFR §60.4202(a)(2), the generator must meet the emission standards for Tier 2 engines in 40 CFR §89.112 and the opacity standards in 40 CFR §89.113. In keeping with 40 CFR §60.4211(c), the generator meets these requirements based on manufacturer specifications indicating EPA certification for Tier 2 engines.

Per 40 CFR §60.4207(b), the generator must use non-road diesel fuel with a maximum sulfur content of 15 parts per million (ppm) per gallon. Because the emergency generator will fire only ultra-low sulfur diesel ULSD, which by definition must meet the requirements of 40 CFR 810(c), i.e. 15 ppm of sulfur content, the generator meets this requirement.

Per 40 CFR 60.4209, the emergency generator must have installed a non-resettable hour meter prior to startup of the engine. As part of the proposed project, the generator will have the meter installed prior to startup.

To maintain the emergency stationary RICE classification for the emergency generator, the RICE must meet the operational requirements of 40 CFR 60.4211(f), summarized below.

- There is no time limit on the use of the RICE during emergency situations.
- The emergency RICE may not operate more than 100 hours per year in non-emergency situations for maintenance checks and readiness testing, as long as such testing is recommended by the government, the manufacturer, the vendor, or the insurance company associated with the engine.

The engine for the generator is also subject to Subpart ZZZZ of Part 63. The emission standards under this subpart applies to stationary CI and spark-ignition RICE based on size, source HAP classification (major or area), and RICE status (new or existing). The proposed project will include one (1) ULSD-fired emergency generator, with a rated capacity of 1,046 hp.

Because the generator is a RICE, is located at a HAP major source, and has a rated capacity greater than 500 hp, the generator is subject to NESHAP Subpart ZZZZ.

ATK proposes to operate the generator for emergency purposes only. As an emergency stationary RICE that will be constructed after December 19, 2002, per 40 CFR 63.6590(b)(1) and (b)(1)(ii), the generator does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ or Subpart A except for the initial notification requirements of 40 CFR 63.6645(f) if the RICE is not operated or is not contractually obligated to be available for more than 15 hours per calendar for emergency demand response.

ATK prepared and submitted a complete application, paid the filing fee, and published a Class I Legal ad in *News Tribune* on May 17, 2014, which is required under Rule 13 for a modification permit. The facility currently holds a valid Title V Operating Permit and included Attachment S of the application for a minor modification of this operating permit. This proposed project will not change the facility's status with regards to any other applicable rules or regulations.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The proposed boilers will not emit any pollutants that aren't already being emitted by another emission source at the Allegany Ballistics Laboratory. Therefore, no information about the toxicity of the hazardous air pollutants (HAPs) is presented in this evaluation.

AIR QUALITY IMPACT ANALYSIS

The writer deemed that an air dispersion modeling study or analysis was not necessary, because the proposed modification does not meet the definition of a major modification of a major source as defined in 45CSR14.

MONITORING OF OPERATIONS

As noted earlier, the modified boilers are subject to the Boiler MACT which requires annual tune-ups for each boiler. The permit will require that the tune-up verify that the optimization of CO must be consistent with the manufacturer's specifications and that the NO_x concentrations or settings are at or within the manufacturer's specifications. The facility will be required to prove the site is using pipeline quality natural gas and distillate oil with less than 0.0015 percent sulfur through fuel records or other supplier requirements. Because these boilers can use two different types of fuels, there is an annual heat input limit. ATK will have to track the fuel usage on a monthly basis and then use it to calculate the total heat energy input into the units from the previous 12 months. Other monitoring is tracking the length of time distillate oil is used and for what purpose to prove the units remain a "Gas 1 Unit" under Subpart DDDDD. When one of the boilers has operated for more than 30 consecutive days on distillate oil, the

permit will require a demonstration that the unit is achieving the visible emission standard of Rule 2 (10 % opacity limit).

The generator will be required to only use ultra-low sulfur diesel and install a non-resettable hour meter. ATK will be required to records hours of non-emergency operation to prove the engine does not exceed the 100 hours of non-emergency operating limit.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates the proposed modification of the Allegany Ballistics Laboratory for a new steam plant will meet all the requirements of the application rules and regulations when operated in accordance to the permit application. Therefore, the writer recommends granting ATK a Rule 13 modification permit for their new steam plant at the Allegany Ballistics Laboratory located near Rocket Center, WV.

Edward S. Andrews, P.E.
Engineer

July 3, 2014
Date

GAS TURBINE – NATURAL GAS

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Columbia – Frametown

54-007-00100

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Columbia Gas Transmission, LLC
Frametown Compressor Station
R30-00700100-2016

William F. Durham
Director

Issued: November 7, 2016 • Effective: November 21, 2016
Expiration: November 7, 2021 • Renewal Application Due: May 7, 2021

Permit Number: **R30-00700100-2016**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Frametown Compressor Station**
Permittee Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Frametown, Braxton County, West Virginia
Facility Mailing Address:	Route 9, Frametown, WV
Telephone Number:	(304) 357-2047
Type of Business Entity:	LLC
Facility Description:	Natural Gas Compression Facility
SIC Codes:	4922
UTM Coordinates:	511.99 km Easting • 4,279.09 km Northing • Zone 17

Permit Writer: Rex Compston, P.E.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 4

3.0. Facility-Wide Requirements and Permit Shield 13

Source-specific Requirements

4.0. 45CSR13 Permit Conditions from R13-2234A 21

5.0. 40 C.F.R. 60, Subpart JJJJ Requirements for Emergency Reciprocating Internal Combustion Engine (RICE) 26

6.0. 40 C.F.R. 60, Subpart KKKK Requirements for Turbine 30

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
04501	E01	Turbine Engine/Centrifugal Compressor; Rolls Royce Avon 1533-76G	1969	12,500 Hp	N/A
04502	E02	Turbine Engine/Centrifugal Compressor; Solar T-3000	1971	3350 Hp	N/A
04503	E03	Turbine Engine/Centrifugal Compressor; Solar T-3000	1973	3550 Hp	N/A
04504	E04	Solar Mars 100-16000S Turbine/Compressor	2013	16,300 Hp 122 MMBtu/hr	N/A
045G5	G05	Emergency Generator	2013	925 Hp	N/A
045H1	H1	Fuel Gas Heater	2013	0.80 MMBtu/hr	N/A
045SH1	SH1	Bruest Model 24-72 space heaters (40)	2013	Each 0.072 MMBtu/hr	N/A

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2234A	04-19-2013

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding. **[45CSR§30-5.3.e.3.B. and 45CSR38]**

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect. **[45CSR§30-5.1.e.]**

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1; State Enforceable Only]

3.2. Monitoring Requirements

3.2.1. Reserved

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the

Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478	Associate Director Office of Air Enforcement and Compliance Assistance (3AP20) U. S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified

in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR4	*To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors:* This State Rule shall not apply to the following source of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.
45CSR10	*To Prevent and Control Air Pollution from the Emission of Sulfur Dioxide* - Emissions from Indirect Heat Exchangers. WVDAQ has determined that 45CSR10 does not apply to natural gas fired engines.
45CSR21	*To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:* The facility is not located in a designated VOC County. Therefore, this State Rule does not apply.
45CSR27	*To Prevent and Control the Emissions of Toxic Air Pollutants:* Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R. Part 60 Subpart OOOO	*Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution.* The Storage Vessel requirements defined for transmission sources are not applicable to this site because there are no affected source storage vessels constructed or reconstructed after August 23, 2011 and on or before September 18, 2015 as stated in accordance with 40CFR§60.5365(e). No other affected sources were identified at this site.
40 C.F.R. Part 60 Subpart OOOOa	*Standards of Performance for Crude Oil and Natural Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015.* The GHG and VOC requirements defined by this NSPS are not applicable to this site because all affected sources commenced constructed prior to September 18, 2015 in accordance with the applicability criteria defined within [40CFR§60.5365a]. Affected source evaluated are as follows: Compressors, Equipment Leaks, Pneumatic Controllers, and Storage Vessels.
40 C.F.R. Part 60 Subpart K and Ka	*Standards of Performance for Petroleum Liquid Storage Vessels.* All tanks at the station are below the applicability criteria of 40,000 gallons in capacity as stated in 40CFR§§60.110(a) and 60.110a(a)
40 C.F.R. Part 60 Subpart Kb	*Standards of Performance for Volatile Organic Liquid Storage Vessels.* All tanks at the station are below the applicability criteria of 19,813 gallons in capacity as stated in 40CFR§60.110b(a).
40 C.F.R. Part 60, Subpart Dc	*Standards of Performance for Steam Generating Units.* The fuel gas heater burner has a maximum design heat input capacity of less than 10 MMBtu/hr, which is below the applicability threshold defined

	within [40CFR60.40c(a)]. Additionally, the heater is not a steam generating unit.
40 C.F.R. Part 60 Subpart KKK	*Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant(s).* The station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both. As a result, the station has no affected sources operating within this source category.
40 C.F.R. Part 60 Subpart GG	The provisions of this subpart are not applicable to the 04501, 04502, or 04503 turbines at this site because they were installed prior to the October 3, 1977 NSPS applicability date defined within 40CFR§60.330(b). Additionally, no modifications have occurred since the original installation.
40 C.F.R. Part 60 Subpart IIII	*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.* The Compressor Station does not have any compression ignition internal combustion engines.
40 C.F.R. Part 63 Subpart HHH	*National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities.* The Compressor Station is not subject to Subpart HHH since it is not a major source of HAPs and it does not incorporate dehydration operations.
40 C.F.R. Part 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines does not apply to this station since it does not exceed major source HAP thresholds.
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters does not apply to this station since it does not exceed major source HAP thresholds.
40 C.F.R. Part 63 Subpart JJJJJJ	*National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.* The facility is not subject to 40 C.F.R. Part 63 Subpart JJJJJJ since the fuel gas heater (045H1) is not a boiler, but a process heater, which is not regulated under this source category.
40 C.F.R. Part 64	There are no add-on controls, so this is not applicable per 40 CFR§64.2(a)(2).

3.8. Emergency Operating Scenario

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;

b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

d. Credible performance emission test data verifying the emission rates associated with the operation of the

substitute engine shall be submitted to the Director within five (5) days;

e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:

   i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

   ii. Identification of the engine(s) being temporarily replaced;

   iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

   iv. Projected duration of the replacement engine(s); and

   v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0 45CSR13 Permit Conditions from R13-2234A [emission point ID(s): E01, E04, H1, and G05]

4.1. Limitations and Standards

4.1.1. Emissions from the equipment listed in Table 1.0 of this permit shall not exceed the following:

	NO_x		CO		VOC		SO_2		$PM/PM_{2.5}$	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	49.5	49.5	83.6	83.6	0.28	0.28	0.11	0.11	0.28	0.28
E04	7.34	32.97	7.44	100.46	2.14	20.11	0.35	0.19	2.12	9.62
H1	0.08	0.35	0.07	0.29	0.01	0.02	0.01	0.01	0.01	0.01
G05	4.07	1.02	2.65	0.66	0.53	0.13	0.37	0.09	0.01	0.01
Total	**60.99**	**83.84**	**93.76**	**185.01**	**2.96**	**20.54**	**0.84**	**0.40**	**2.42**	**9.92**

Note: all hourly emissions based on normal operation (load>50% and ambient temperature >0 ºF)

	Formaldehyde		Toluene		Xylene		Acetaldehyde		Benzene		Ethylbenzene		Total HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	0.11	0.11	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.16	0.16
E04	0.09	0.37	0.02	0.07	0.01	0.03	0.01	0.02	0.01	0.01	0.01	0.02	0.13	0.54
H1	0.01	0.01	--	--	--	--	--	--	--	--	--	--	0.01	0.01
G05	0.34	0.08	0.01	0.01	0.01	0.01	0.06	0.02	0.01	0.01	0.01	0.01	0.40	0.10
Total	**0.55**	**0.57**	**0.05**	**0.10**	**0.03**	**0.05**	**0.08**	**0.05**	**0.03**	**0.03**	**0.03**	**0.04**	**0.70**	**0.81**

	Methane	CO_2	N_2O	CO_2e
	tpy	tpy	tpy	tpy
E01	1.27	16,225	0.45	16,391
E04	4.52	58,796	1.58	59,381
H1	0.03	412	--	413
G05	1.98	174	--	216
Total	**7.80**	**75,607.00**	**2.03**	**76,401.00**

[45CSR13 Permit R13-2234, Condition 4.1.1]

4.1.2. Turbine E01 shall not operate more than 2,000 hours per year based on a rolling 12 month total.
[45CSR13 Permit R13-2234, Condition 4.1.2]

4.1.3. Emergency Generator G05 shall not operate more than 500 hours per year based on a rolling 12 month total. **[45CSR13 Permit R13-2234, Condition 4.1.3]**

4.1.4. The Fuel Heater (H1) shall operate according to the following requirements:

a. The MDHI of the Line Heater shall not exceed 0.80 mmBtu/hr and the unit shall only be fired by natural gas; and

b. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR13 Permit R13-2234, Condition 4.1.4; 45CSR§2-3.1]

4.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 Permit R13-2234, Condition 4.1.8]

4.2. Monitoring Requirements

4.2.1. For the purposes of demonstrating compliance with visible emissions limitations set forth in 4.1.4(b), the permittee shall:

a. Conduct an initial Method 22 visual emission observation on the fuel heater to determine the compliance with the visible emission provisions. The permittee shall take a minimum of two (2) hours of visual emissions observations on the fuel heaters.

b. Conduct monthly Method 22 visible emission observations of the fuel heater to ensure proper operation for a minimum of ten (10) minutes each month the fuel heater is in operation.

c. In the event visible emissions are observed in excess of the limitations given under 4.1.4(b), the permittee shall take immediate corrective action.

[45CSR13 Permit R13-2234, Condition 4.3.9]

4.2.2. Compliance with the annual emission limits in 4.1.1 of this permit shall be based on a rolling 12 month total. Turbine E04 monthly emissions shall be demonstrated using the following equation:

$ME_{Px} = DLN_{Px}$* DLN hours + LL_{Px}*LL hours + LT_{Px}*LT hours + SS_{Px}*SS cycles

Where:

ME_{Px}	=	Monthly emissions of Pollutant X
DLN_{Px}	=	Hourly emission rate of Pollutant X during normal operation
DLN	=	Number of hours of normal operation in said month
LL_{Px}	=	Hourly emission rate of Pollutant X during low load (<50%) operation
LL	=	Number of hours of low load operation in said month
LT_{Px}	=	Hourly emission rate of Pollutant X during low temperatures (<0ºF)
LT	=	Number of hours of low temperature operation in said month
SS_{Px}	=	Unit emission rate (lb/cycle) for Pollutant X during startup/shutdown cycles
SS	=	Number of startup/shutdown cycles for said month

Hourly emission rates used in the above calculation shall be based on either data provided in Tables 2-2 and 2-3 of the letter from Columbia Gas to Steven R. Pursley dated January 30, 2013 or any actual source specific testing (whichever is higher).

From January 30, 2013 letter to Steven R. Pursley:

Table 2-2. Emission Rates for Existing and Proposed Turbines During Normal Operation (g/hp-hr)[a]

Emission Point ID	**Model**	**Basis**	**NO_x**	**CO**	**VOC**	**SO_2**	**PM_{10}**	**CH_2O**
E01	Rolls Royce Avon 1533-76G	Maximum Power	1.80	3.04	*0.01*	*0.01*	*0.01*	*0.004*
E02	Solar T-3000	Maximum Power	2.50	0.20	0.02	*0.01*	*0.01*	*0.003*
E03	Solar T-3000	Maximum Power	2.50	0.20	0.02	*0.01*	*0.01*	*0.003*
E04	Solar Mars	Maximum Power	0.21	0.21	0.02	*0.01*	0.06	0.01

[a]Values in italics based on AP-42 emission factors.

Table 2-3. Emissions from Proposed Mars Turbine during non-SoLoNOx Operation

Mode	**Basis**	**ppmv @ 15% O_2**			**lb/hr**		
		NO_x	**CO**	**VOC**	**NO_x**	**CO**	**VOC**
Low Ambient Temperature	<0ºF	120	150	50	32.86	41.07	2.14
Low Load	<50%	70	8,000	800	11.36	1297.95	34.29
Startup/Shutdown*	Per cycle				3.10	282.70	3.90

*Values are in lbs per startup/shutdown cycle (cycle includes 9 minute for startup and 5 minutes for shutdown) and includes emissions from pneumatic starter.

[45CSR13 Permit R13-2234, Condition 4.3.4; Letter from Columbia Gas to Steven R. Pursley dated January 30, 2013; Emission Point ID (E04)]

4.3. Testing Requirements

4.3.1. N/A

4.4. Recordkeeping Requirements

4.4.1. The permittee shall maintain records of all visual emission observations pursuant to the monitoring required under 4.2.1 including any corrective action taken.
[45CSR13 Permit R13-2234, Condition 4.3.10]

4.4.2. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR13 Permit R13-2234, Condition 4.3.1]

4.4.3. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 Permit R13-2234, Condition 4.3.2]

4.4.4. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 Permit R13-2234, Condition 4.3.3]

4.4.5. In order to determine compliance with 4.1.1 and 4.2.2 of this permit, the permittee shall maintain certifiable monthly records of the following:

a. Monthly hours of operation of compressor turbine E04 during normal operation.

b. Monthly hours of operation of compressor turbine E04 during low load operations.

c. Monthly hours of operation of compressor turbine E04 during low ambient temperature.

d. Monthly number of compressor turbine E04 startup and shutdown cycles.

[45CSR13 Permit R13-2234, Condition 4.3.5, Emission Point ID (E04)]

4.4.6. In order to determine compliance with 4.1.2 of this permit, the permittee shall maintain certifiable monthly records of the number of hours of operation of the turbine E01.
[45CSR13 Permit R13-2234, Condition 4.3.6, Emission Point ID (E01)]

4.4.7. In order to determine compliance with 4.1.3 of this permit, the permittee shall maintain certifiable monthly records of the number of hours of operation of the Emergency Generator G05.
[45CSR13 Permit R13-2234, Condition 4.3.7, Emission Point ID (G05)]

4.5. Reporting Requirements

4.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13 Permit R13-2234, Condition 4.3.11]

4.6. Compliance Plan

4.6.1. None

5.0 40 C.F.R. 60, Subpart JJJJ Requirements for Emergency Reciprocating Internal Combustion Engine (RICE) [emission point ID(s): G05]

5.1. Limitations and Standards

5.1.1. Emissions from Emergency Generator G05 shall not exceed the following:

NSPS JJJJ –Limits	NOx	CO	VOC
Standard (g/Hp hr)	2.0	4.0	1.0

[**45CSR16; 40CFR§60.4233(e) and 45CSR13 Permit R13-2234, Condition 4.1.5]**

5.1.2. The permittee must install a non-resettable hour meter.
[45CSR16; 40CFR§60.4237(a)]

5.1.3. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

a. There is no time limit on the use of emergency stationary ICE in emergency situations.

b. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (b)(1) through (3) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (b).

1. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

2. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

3. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b) of this section. Except as provided in paragraph (c)(1) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

i. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
ii. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
iv. The power is provided only to the facility itself or to support the local transmission and distribution system.
v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR16; 40CFR§60.4243(d)]

5.1.4. The permittee must operate and maintain the stationary SI ICE as required in 40CFR§60.4233 over the entire life of the engine.
[45CSR16; 40CFR§60.4234]

5.1.5. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40CFR§60.4233.
[45CSR16; 40CFR§60.4243(e)]

5.2. Monitoring Requirements

5.2.1. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40CFR§60.4233(d) or (e), you must demonstrate compliance according to the methods specified in the following paragraphs:

a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40CFR§§60.4233(d) or (e) and according to the requirements specified in 40CFR§60.4244, as applicable, and according to the following paragraph:
[40CFR§60.4243(b)(2)]

1. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
[40CFR§60.4243(b)(2)(ii)]

[45CSR16; 40CFR§60.4243(b)(2) and 45CSR13 Permit R13-2234, Conditions 4.2.1 and 4.3.8]

5.3. Testing Requirements

5.3.1. Testing requirements are included in condition 5.2.1.a.1.

5.4. Recordkeeping Requirements

5.4.1. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a) through (d) of this section.

a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. Reserved

d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40CFR§60.4243(a)(2), documentation that the engine meets the emission standards.

[45CSR16; 40CFR§60.4245(a)]

5.4.2. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.

The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[45CSR16; 40CFR§60.4245(b)]

5.5. Reporting Requirements

5.5.1. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40CFR§§60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in 40CFR§60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (a) through (c) of this section.

a. The report must contain the following information:

1. Company name and address where the engine is located.

2. Date of the report and beginning and ending dates of the reporting period.

3. Engine site rating and model year.

4. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

5. Hours operated for the purposes specified in 40CFR§§60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in 40CFR§§60.4243(d)(2)(ii) and (iii).

6. Number of hours the engine is contractually obligated to be available for the purposes specified in 40CFR§§60.4243(d)(2)(ii) and (iii).

7. Hours spent for operation for the purposes specified in 40CFR§60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40CFR§60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40CFR§60.4.

[45CSR16; 40CFR§60.4245(e)]

5.6. Compliance Plan

5.6.1. None

6.0 40 C.F.R. 60, Subpart KKKK Requirements for Turbine [emission point ID(s): E04]

6.1. Limitations and Standards

6.1.1. NO_x emissions from the Solar Mars Turbine (E04) shall not exceed 25 ppm at 15% O_2 (or an alternative limit of 150 ng/J of useful output).
[45CSR16; 40CFR§60.4320(a), 45CSR13 Permit R13-2234, Condition 4.1.6]

6.1.2. The Solar Mars Turbine (E04) shall only burn fuel with a total potential SO_2 emission rate of less than 0.06 lb/MMBTU.
[45CSR16; 40CFR§60.4330(a)(2), 45CSR13 Permit R13-2234, Condition 4.1.7]

6.1.3. The permittee must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
[45CSR16; 40CFR§60.4333(a)]

6.1.4. If you are not using water or steam injection to control NO_X emissions, you must perform annual performance tests in accordance with 40CFR§60.4400 to demonstrate continuous compliance. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests.
[45CSR16; 40CFR§60.4340(a)]

6.1.5. You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365.
[45CSR16; 40CFR§60.4360]

6.2. Monitoring Requirements

6.2.1. You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for units located in continental areas. You must use one of the following sources of information to make the required demonstration:

a. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet, has potential sulfur emissions of less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas; or
b. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

[45CSR16; 40CFR§60.4365]

6.3. Testing Requirements

6.3.1. Within 180 days of startup or within 60 days of achieving maximum load operation (whichever occurs first), the permittee will perform testing to determine compliance with 6.1.1 of this permit.

a. The permittee must conduct an initial performance test, as required in §60.8. Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

1. There are two general methodologies that you may use to conduct the performance tests. For each test run:

i. Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_x emission rate:

$$E = \frac{1.194 \times 10^{-7} * (NO_x)_c * Q_{std}}{P} \qquad \text{(Eq. 5)}$$

Where:

E = NO_x emission rate, in lb/MWh

1.194×10^{-7} = conversion constant, in lb/dscf-ppm

$(NO_x)_c$ = average NO_x concentration for the run, in ppm

Q_{std} = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

ii. Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_x emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_x emission rate in lb/MWh.

2. Sampling traverse points for NO_x and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

3. Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

i. The permittee may perform a stratification test for NO_x and diluent pursuant to

A. [Reserved], or

B. The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

ii. Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

A. If each of the individual traverse point NO_x concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO_2(or O_2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_x concentration during the stratification test; or

B. For turbines with a NO_x standard greater than 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points; or

C. For turbines with a NO_x standard less than or equal to 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO_2 (or O_2) from the mean for all traverse points

[45CSR16; 40CFR§60.4400(a) and 45CSR13 Permit R13-2234, Condition 4.2.2]

6.4. Recordkeeping Requirements

6.4.1. N/A

6.5. Reporting Requirements

6.5.1. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with 40CFR§60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
[45CSR16; 40CFR§60.4375(a) and 45CSR13 Permit R13-2234, Condition 4.4.1]

6.5.2. For each affected unit that performs annual performance tests in accordance with 40CFR§60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.
[45CSR16; 40CFR§60.4375(b) and 45CSR13 Permit R13-2234, Condition 4.4.1]

6.5.3. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.
[45CSR16; 40CFR§60.4395]

6.6. Compliance Plan

6.6.1. None

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Randy C. Huffman, Cabinet Secretary
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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2234A
Plant ID No.:	007-00100
Applicant:	Columbia Gas Transmission, LLC
Facility Name:	Frametown
Location:	Braxton County
SIC Code:	4922
Application Type:	Modification
Received Date:	October 22, 2012
Engineer Assigned:	Steven R. Pursley, PE
Fee Amount:	$2,000.00
Date Received:	October 25, 2012
Complete Date:	January 2, 2012
Due Date:	April 2, 2012
Applicant Ad Date:	October 23, 2012
Newspaper:	*Braxton Citizens News*
UTM's:	Easting: 511.99 km Northing: 4,279.09 km Zone:17
Description:	Installation of 40 space heaters, a new 16,300 hp turbine/compressor, new fuel gas heater and replacement of an existing 400 hp emergency generator with a new 925 hp emergency generator. With the installation of the new turbine, an old 12,500 hp turbine will be moved to standby status.

DESCRIPTION OF PROCESS

Pipeline transmission of natural gas requires that the gas be compressed. At Frametown, natural gas fired turbines are used to drive centrifugal gas compressors. The power output from a natural gas fired turbine is directly related to the fuel input rate

and to the ratio of combustion air to fuel. As ambient temperatures decrease, a turbines maximum power output will increase due to the increased density of inlet air. The Solar dry low NO_x (DLN) combustion system ($SoLoNO_x$) for a Solar turbine limits formation of NO_x, CO and VOC by premixing air and fuel prior to combustion.

SITE INSPECTION

No site inspection was performed by the writer. The facility is an existing well known source to DAQ. Mike Kolb of DAQs Enforcement section performed a full, on site inspection on March 7, 2011. The facility was found to be in compliance.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions from the facility will be as indicated below. Note that these emissions are simply the existing PTE from the equipment involved in this modification (NOT facility wide PTE), proposed PTE for the new/modified equipment (NOT facility wide PTE) and resulting change in PTE from the facility. For the actual netting analysis see the "Regulatory Applicability" section of this evaluation.

Criteria Pollutants

EXISTING PTE

Existing criteria PTE (from the equipment being removed/limited) is based on AP-42 emission factors (PM, VOCs for turbine E01, PM for emergency generator G04), mass balance (SO_2) and vendor/test data (CO, NO_x for turbine, CO, NO_x and VOCs for emergency generator). Additionally, the calculations assume maximum load and operation 8,760 hours per year.

	NO_x		CO		VOC		SO_2		$PM/PM_{2.5}$	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	49.5	216.8	83.6	366.17	0.28	1.23	0.11	0.49	0.28	1.23
G04	2.29	10.03	1.54	6.75	0.66	2.89	0.21	0.92	0.11	0.48
Total	**49.50**	**226.83**	**85.14**	**372.92**	**0.94**	**4.12**	**0.32**	**1.41**	**0.39**	**1.71**

PROPOSED PTE

Proposed PTE (from the new and modified equipment) is based on the following: criteria PTE is based on vendor data/tests for all pollutants from the turbine except for SO_2 which is based on mass balance. For the new emergency generator emissions are based on AP-42 emission factors (PM), mass balance (SO_2) and vendor/test data (CO, NO_x and VOCs). All space heater calculations use AP-42 emission factors for natural

gas combustion and conservatively assume 8,760 hours of operation. Additionally, the emissions in the following tables are for all 40 space heaters combined. For new Engine E04, the calculations assume operations 8,760 hours per year. However, because the SoLoNox controls cannot operate properly at very low ambient temperatures or below 50% of peak load the potential emission estimates include 40 hours per year of operation below 0°F and 100 hours per year at low load. Additionally, an average of 3 startup/shutdown cycles per week (156 per year) were assumed, in order to be conservative. Since engine E01 is being moved to "emergency standby" status, it will be limited to 2000 hours of operation per year in the permit and the calculations reflect that. New Heater H1 is conservatively assumed to operation 8,760 hours per year while the emergency generator is assumed to operate 500 hours per year. Note however, that ALL hourly emissions are based on normal operating mode. Anytime annual emissions are based on operation less than 8,760 hours per year, those limits will be included in the permit.

	NO_x		CO		VOC		SO_2		$PM/PM_{2.5}$	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	49.5	49.5	83.6	83.6	0.28	0.28	0.11	0.11	0.28	0.28
E04	7.34	32.97	7.44	100.46	2.14	20.11	0.35	0.19	2.12	9.62
H1	0.08	0.35	0.07	0.29	0.01	0.02	0.01	0.01	0.01	0.01
SH1 (40)	0.29	1.24	0.24	1.04	0.02	0.07	0.01	0.01	0.03	0.10
G05	4.07	1.02	2.65	0.66	0.53	0.13	0.37	0.09	0.01	0.01
Total	**61.28**	**85.08**	**94.00**	**186.05**	**2.98**	**20.61**	**0.85**	**0.41**	**2.45**	**10.02**

Therefore the difference in PTE will be as follows:

	NO_x		CO		VOC		SO_2		$PM/PM_{2.5}$	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Total	**11.78**	**-141.75**	**8.84**	**-186.86**	**2.04**	**16.49**	**0.53**	**-1.00**	**2.06**	**8.31**

Non-criteria Pollutants

EXISTING EMISSIONS

Formaldehyde and total HAP emissions are based on AP-42 and 8,760 hours per year of operation.

	Formaldehyde		Toluene		Xylene		Acetaldehyde		Benzene		Ethylbenzene		Total HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	0.11	0.49	0.02	0.09	0.01	0.05	0.01	0.03	0.01	0.01	0.01	0.03	0.16	0.67
G04	0.17	0.74	0.01	0.01	0.01	0.01	0.01	0.04	0.01	0.03	0.01	0.01	0.19	0.82
Total	**0.28**	**1.23**	**0.03**	**0.10**	**0.02**	**0.06**	**0.02**	**0.07**	**0.02**	**0.04**	**0.02**	**0.04**	**0.35**	**1.49**

PROPOSED PTE

Formaldehyde, CO_2 and total HAP emissions are based on AP-42, manufacturer data and 2,000 hours per year of operation for E01, 500 hours of operation for G05 and 8,760 hours of operation for E04 and H1.

	Formaldehyde		Toluene		Xylene		Acetaldehyde		Benzene		Ethylbenzene		Total HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E01	0.11	0.11	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.16	0.16
E04	0.09	0.37	0.02	0.07	0.01	0.03	0.01	0.02	0.01	0.01	0.01	0.02	0.13	0.54
H1	0.01	0.01	--	--	--	--	--	--	--	--	--	--	0.01	0.01
G05	0.34	0.08	0.01	0.01	0.01	0.01	0.06	0.02	0.01	0.01	0.01	0.01	0.40	0.10
Total	**0.55**	**0.57**	**0.05**	**0.10**	**0.03**	**0.05**	**0.08**	**0.05**	**0.03**	**0.03**	**0.03**	**0.04**	**0.70**	**0.81**

Note: Methane and N_2O emissions were not submitted by the applicant so they were performed by the writer.

	Methane	CO_2	N_2O	CO_2e
	tpy	tpy	tpy	tpy
E01	1.27	16,225	0.45	16,391
E04	4.52	58,796	1.58	59,381
H1	0.03	412	--	413
SH1	0.03	1484	0.03	1494
G05	1.98	174	--	216

Total	**7.83**	**77,091.00**	**2.06**	**77,895.00**

REGULATORY APPLICABILITY

The following state and federal rules apply to the modified portion of the facility:

45CSR2: To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers

The Fuel Gas Heater (H1) has been determined to meet the definition of a "fuel burning unit" under 45CSR2 and is, therefore, subject to the applicable requirements therein. However, pursuant to the exemption given under §45-2-11, as the MDHI of the unit is less than 10 mmBtu/hr (800,000 Btu/hr), it is not subject to sections 4, 5, 6, 8 and 9 of 45CSR2. The only remaining substantive requirement is under Section 3.1 - Visible Emissions Standards.

Pursuant to 45CSR2, Section 3.1, the line heater is subject to an opacity limit of 10%. Proper maintenance and operation of the unit (and the use of natural gas as fuel) should keep the opacity of the unit well below 10% during normal operations.

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification of the Frametown Compressor Station has a potential to emit in excess of six (6) lbs/hour and ten (10) TPY of a regulated pollutant and, therefore, is subject to 45CSR13.

As required under §45-13-8.3, Columbia placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on October 23, 2012 in *Braxton Citizens News* and the affidavit of publication for this legal advertisement was submitted on November 1, 2012. Upon the DAQs preliminary determination to approve the permit application, Columbia will be required to run a commercial display ad and post a sign in accordance with §45-13-8.5.a (Notice Level C).

45CSR30: Requirements for Operating Permits

The facility is an existing major Title V source with an issued Title V permit. This modification does not change that status.

40 CFR 60 Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

The proposed 925 hp emergency generator G5 is defined under 40 CFR 60, Subpart JJJJ as stationary spark-ignition internal combustion engines (SI ICE) and is, pursuant to §60.4230(a)(4)(ii), subject to the applicable provisions of the rule. Pursuant to §60.4233(e): "Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE." Therefore, as the proposed generator engine is an emergency engine greater than 130 HP, the engine must comply with the following emission standards:

	NO_x	CO	VOC
Standard (g/HP-hr)	2.0	4.0	1.0

Since the applicant submitted nothing indicating that the engine is a "certified engine" (and I can find nothing online indicating that it is a certified engine) under the rule, it will have to demonstrate compliance by performing testing in accordance with §60.4244 of the rule. Additionally, per §60.4243(b)(2)(i) the permittee will have to "keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions."

40 CFR 60 Subpart KKKK: Standards of Performance for Stationary Combustion Turbines.

Per §60.4305, Subpart KKKK applies to combustion turbines with a peak heat input of 10 MMBTU/hr or greater. Since the new Solar Mars turbine is rated at 122 MMBTU/hr it will be subject to the rule. §60.4320 requires the turbine to meet the NO_x requirement in Table 1 of the rule. Since the turbine is a new, natural gas fired turbine between 50 and 850 MMBTU/hr, Table 1 requires it to meet a NO_x limit of 25 ppm at 15% O_2 or 150 ng/J of useful output. To demonstrate compliance with the limit, §60.4400(a) requires both an initial (within 180 days of startup or 60 days of achieving full load operation) and annual (not to exceed 14 months from previous test) performance test. However, §60.4340 allows the permittee to be exempted from the annual testing if continuous emission monitors or continuous parameter monitoring systems are installed that meet the requirements of the section. Additionally, if the NO_x testing results show emissions less than 75% of the limit, testing frequency can be reduced to once every 2 years (with no more than 26 months after the previous test.)

The rule also limits SO_2 emissions from the turbine. §60.4330(a)(2) allows the facility to meet this limit by burning fuel with a total potential SO_2 emissions of less than 0.06 lb/MMBTU. Additionally, §60.4365(a) exempts the permittee from monitoring fuel

sulfur content if a source burns only natural gas that is covered by a purchase or transportation contract that limits sulfur to no more than 20 grains per 100 scf. Columbia qualifies for this exemption.

40 CFR 63 Subpart ZZZZ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - (NON-DELEGATION)

The proposed emergency generator appear to be subject to the area source requirements of 40 CFR 63, Subpart ZZZZ. However, the DAQ has not been delegated authority from USEPA to enforce the area source requirements of this rule. Therefore, unless otherwise stated, DAQ did not formally determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart ZZZZ.

NOT APPLICABLE

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration.

Determination of Existing Major Source Status

The plant is located in an area - Braxton County- classified as “in attainment” with all National Ambient Air Quality Standards (NAAQS). Therefore, the major source standards for all criteria pollutants are determined by 45CSR14.

A “major modification” is defined under section 2.40 of 45CSR14 as a:

> . . . physical change in or change in the method of operation of a major stationary source which results in: a significant emissions increase (as defined in subsection 2.75) of any regulated NSR pollutant (as defined in subsection 2.66); and a significant net emissions increase of that pollutant from the major stationary source. [. . .]

The first step in determining whether a change is a “major modification” is determining whether a “physical change in or change in the method of operation of a major stationary source,” is occurring.

The replacement of 12,500 hp turbine/compressor with a 16,300 hp turbine compressor constitutes a “physical change” to the source.

Section 3.4 of 45CSR14 provides guidance on the process of determining if proposed changes are a *major* modification. §45-14-3.4(a) states that:

> . . . consistent with the definition of major modification contained in subsection 2.40, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases -- a significant emissions increase (as defined in subsection 2.75), and a significant net emissions increase (as defined in subsections 2.46 and 2.74). The

proposed project is not a major modification if it does not cause a significant emissions increase. . . .

Therefore, for the proposed changes to meet the definition of a major modification, the changes themselves must result in a significant emissions increase. The methodology for calculating the emissions increase under the first step is given under Sections 3.4(b), 3.4(c), 3.4(d) and 3.4(f). The substantive language of each is given below:

[§45-14-3.4(b)]
The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to subdivisions 3.4.c through 3.4.f.

[§45-14-3.4(c)]
Actual-to-projected-actual applicability test for projects that only involve existing emissions units. -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in subsection 2.63) and the baseline actual emissions (as defined in subdivisions 2.8.a and 2.8.b), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

[§45-14-3.4(d)]
Actual-to-potential test for projects that only involve construction of a new emissions unit(s). – A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in subsection 2.58) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in subdivision 2.8.c) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

[§45-14-3.4(f)]
Hybrid test for projects that involve multiple types of emissions units. -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subdivisions 3.4.c through 3.4.d as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

Note that the following tables represents potential emissions from the new turbine, new heaters and new generator.

	NO_x		CO		VOC		SO_2		$PM/PM_{2.5}$	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E04	7.34	32.97	7.44	100.46	4.26	20.11	0.35	0.19	2.12	9.62

H1	0.08	0.35	0.07	0.29	0.01	0.02	0.01	0.01	0.01	0.01
SH1	0.29	1.24	0.24	1.04	0.02	0.07	0.01	0.01	0.03	0.10
G05	4.07	1.02	2.65	0.66	0.53	0.13	0.37	0.09	0.01	0.01
Total	**11.78**	**35.58**	**10.40**	**102.45**	**4.82**	**20.33**	**0.74**	**0.30**	**2.17**	**9.74**

	Methane	CO_2	N_2O	CO_2e
	tpy	tpy	tpy	tpy
E04	4.52	58,796	1.58	59,381
H1	0.03	412	--	413
SH1	0.03	1484	0.03	1494
G05	1.98	174	--	216
Total	**6.56**	**60,866.00**	**1.61**	**61,504.00**

Pollutant	**Proposed Emissions (tpy)**	**Significant Level (tpy)**	**Significant?**
NO_x	35.58	40.00	No
SO_2	0.30	40.00	No
PM	9.74	25.00	No
PM_{10}	9.74	15.00	No
$PM_{2.5}$	9.74	10.00	No
CO	102.45	100.00	Yes
VOCs	20.25	40.00	No
CO_{2e}	61,504.00	75,000.00	No

"Significant" is defined under §45-14-2.74(a). As shown in the preceding table, the change in emissions resulting from the proposed modifications exceeds the definition of "significant" only for CO. In order to avoid PSD applicability Columbia has proposed to move turbine/compressor E01 to "standby status" thus limiting (through this

permit) its allowable operating hours to 2,000 per year. These reductions can only be included in the analysis as part of step 2 - the determination of a "significant net emissions increase."

It is important to note that when any emissions decrease is claimed (including those associated with the proposed modification), the second step of the test is triggered - a determination if the project results in a "significant **net** emissions increase." This determination is defined under the definition of "net emissions increase" [§45-14-2.46] and must include "any other increases and decreases in actual emissions at the major source that are contemporaneous with the particular change and are otherwise creditable." A change is contemporaneous if it "occurs not more than five (5) years prior to the date on which construction on the particular change commences nor later than the date on which the increase from the particular change occurs.

In order to claim a reduction for netting purposes, said reduction must have occurred (per 45CSR14.2.46.c) within the 5 years preceding the date upon which the actual construction or emission increase occurred. In section 2.3 of the application, Columbia lists no other contemporaneous increases that have occurred at the facility other than the decreases which are part of the application and netting analysis.

Pollutant	E01 Past Actual Emissions (tpy)[1]	E01Proposed Emissions (tpy)	Decrease (tpy)
CO	89.54	83.70	-5.84

[1]The applicant selected the 24 consecutive months from May 2007 through April 2009 as representative of past actual emissions. The applicant based these emission calculations on a test derived emission factor of 0.0067 pounds per BHP-hr.

Therefore the "Net Emission Increase" under 45CSR14 is as follows:

Pollutant	Increases (tpy)	Decreases (tpy)	Change (tpy)
CO	102.45	-5.84	96.61

With the decrease in CO emissions from the reduction in operating hours of E01, the net emissions increase of CO falls below the significance level of 100 TPY. Therefore, the proposed modifications are not defined as a "major modification" and are not subject to PSD review.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The majority of non-criteria regulated pollutants fall under the definition of HAPs

which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. Columbia Gas included the following HAPs as emitted in substantive amounts in their emissions estimate: Benzene, Ethylbenzene, Acetaldehyde, Formaldehyde, Toluene, and Xylene. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	Category B1 - Probable Human Carcinogen
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Ethylbenzene	VOC	No	Inadequate Data
Acetaldehyde	VOC	Yes	Category B2 - Probable Human Carcinogen
Toluene	VOC	No	Inadequate Data
Xylenes	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health affects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

AIR QUALITY IMPACT ANALYSIS

Since this is a minor modification (as defined in 45CSR14) to a major stationary source, no modeling was performed.

MONITORING AND TESTING OF OPERATIONS

The permittee shall monitor and record the following:

* Monthly operating hours of the compressor turbines (E04) and (E01) and the Emergency Generator (G5).

* Monthly operating hours of the compressor turbine (E04) at less than 50% load.

* Monthly operating hours of the compressor turbine (E04) at less than 0°F.

* Monthly number of compressor turbine (E04) startup and shutdown cycles.

* Per §60.4243(b)(2)(i) for the emergency generator, the permittee will have to "keep a maintenance plan and records of conducted maintenance and must..."

The permittee shall perform the following tests:

* Testing to determine the emission rates of NO_x, CO and VOCs from the emergency generator per §60.4244.

* Testing to determine the NO_x emissions from the new turbine (E04) per §60.4400(a).

CHANGES TO PERMIT R13-2234

R13-2234 addressed only generator G4. Since that generator is being removed with this application, R13-2234A is a completely new permit.

RECOMMENDATION TO DIRECTOR

Information supplied in the application indicates that compliance with all applicable regulations will be achieved. Therefore it is the recommendation of the writer that permit R13-2234A for the modification of a compressor station in Frametown, Braxton County, be granted to Columbia Gas Transmission, LLC.

Columbia Ceredo

54-099-00013

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Columbia Gas Transmission, LLC
Ceredo Compressor Station
R30-09900013-2016

William F. Durham
Director

Issued: December 27, 2016 • Effective: January 10, 2017
Expiration: December 27, 2021 • Renewal Application Due: June 27, 2021

Permit Number: **R30-09900013-2016**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Ceredo Compressor Station**
Permittee Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Ceredo, Wayne County, West Virginia
Facility Mailing Address:	1664 Walker's Branch Road, Ceredo, WV 25704
Telephone Number:	(304) 453-7502
Type of Business Entity:	LLC
Facility Description:	Natural Gas Compressor Station
SIC Codes:	4922
UTM Coordinates:	366.1 km Easting • 4247.5 km Northing • Zone 17

Permit Writer: Robert Mullins

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits 3

2.0 General Conditions 4

3.0 Facility-Wide Requirements 13

4.0 Source Specific Requirements [emission point ID(s): BL2, H1, H2] 26

5.0 Source Specific Requirements [emission point ID(s): E01, E02, E03, E04, E05, E06, E07, G3, G4] 33

6.0 Source Specific Requirements [emission point ID(s): E10] 41

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
00501	E01	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1954	2,800 HP	N/A
00502	E02	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1954	2,800 HP	N/A
00503	E03	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1954	2,800 HP	N/A
00504	E04	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1957	2,800 HP	N/A
00505	E05	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1958	2,800 HP	N/A
00506	E06	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMWH-8; 2-cycle, lean burn	1960	2,800 HP	N/A
00507	E07	Reciprocating Engine/Integral Compressor; Cooper-Bessemer 8V-250; 2-cycle, lean burn	1965	2,700 HP	N/A
00510	E10	Solar Titan 250 Combustion Turbine	2017	30,399 HP	SoloNO_x
005G3	G3	Reciprocating Engine/Generator; Waukesha F3521GL; 4-cycle, lean burn; emergency	1996	738 HP	N/A
005G4	G4	Waukesha VGFL36GL Emergency Generator	2017	880 HP	N/A
BLR2	BL2	Hurst S-4-G-150-15 Boiler	2012	6.276 MMBtu/hr	N/A
HTR1	H1	Fuel Gas Heater	1998	0.35 MMBtu/hr	N/A
HTR2	H2	Heater	2017	1.0 MMBtu/hr	NA

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1856A	August 30, 2016

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and

variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. Only those emission units/sources as identified in Table 1.1, with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility by this permit. In accordance with the information filed in Permit application-R13-1856A, the emission units/sources identified under Table 1.1 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.1.
[45CSR13, R13-1856, Condition 4.1.1]

3.1.10. Facilities using Mercaptan Tanks shall use proper odor control methods to comply with 45CSR4. **[45CSR§30-12.7 State-Enforceable only.]**

3.1.11. Emergency Operating Condition/Unit Replacement:

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;

b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) business days;

e. The permittee must provide written notification to the Director within five (5) business days of the replacement. This notification must contain:

i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

ii. Identification of the engine(s) being temporarily replaced;

iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

iv. Projected duration of the replacement engine(s); and

v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

3.1.12. **40 C.F.R. 60, Subpart OOOOa**

For each affected facility under §60.5365a(j), you must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of paragraphs (a) through (j) of §60.5397a. These requirements are independent of the closed vent system and cover requirements in §60.5411a.

a. You must monitor all fugitive emission components, as defined in §60.5430a, in accordance with 40 C.F.R. §§60.5397a(b) through (g). You must repair all sources of fugitive emissions in accordance with 40 C.F.R. §60.5397a(h). You must keep records in accordance with 40 C.F.R. §60.5397a(i) and report in accordance with 40 C.F.R. §60.5397a(j). For purposes of this section, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

b. You must develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with 40 C.F.R. §§60.5397a(c) and (d).

c. Fugitive emissions monitoring plans must include the elements specified in 40 C.F.R. §§60.5397a(c)(1) through (8), at a minimum.

1. Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by 40 C.F.R. §§60.5397a(f) and (g).

2. Technique for determining fugitive emissions (i.e., Method 21 at 40 CFR part 60, appendix A-7, or optical gas imaging).

3. Manufacturer and model number of fugitive emissions detection equipment to be used.

4. Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. Your repair schedule must meet the requirements of 40 C.F.R. §60.5397a(h) at a minimum.

5. Procedures and timeframes for verifying fugitive emission component repairs.

6. Records that will be kept and the length of time records will be kept.

7. If you are using optical gas imaging, your plan must also include the elements specified in 40 C.F.R. §§60.5397a(c)(7)(i) through (vii).

i. Verification that your optical gas imaging equipment meets the specifications of 40 C.F.R. §§60.5397a(c)(7)(i)(A) and (B). This verification is an initial verification and may either be

performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitives emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.

A. Your optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.

B. Your optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤60g/hr from a quarter inch diameter orifice.

ii. Procedure for a daily verification check.

iii. Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.

iv. Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.

v. Procedures for conducting surveys, including the items specified in 40 C.F.R. §§60.5397a(c)(7)(v)(A) through (C).

A. How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

B. How the operator will deal with adverse monitoring conditions, such as wind.

C. How the operator will deal with interferences (e.g., steam).

vi. Training and experience needed prior to performing surveys.

vii. Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

8. If you are using Method 21 of appendix A-7 of this part, your plan must also include the elements specified in 40 C.F.R. §§60.5397a(c)(8)(i) and (ii). For the purposes of complying with the fugitive emissions monitoring program using Method 21 a fugitive emission is defined as an instrument reading of 500 ppm or greater.

i. Verification that your monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If you wish to use an analyzer other than a FID-based instrument, you must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest).

ii. Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1.

d. Each fugitive emissions monitoring plan must include the elements specified in 40 C.F.R. §§60.5397a(d)(1) through (4), at a minimum, as applicable.

1. Sitemap.

2. A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.

3. If you are using Method 21, your plan must also include a list of fugitive emissions components to be monitored and method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.).

4. Your plan must also include the written plan developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with 40 C.F.R. §60.5397a(g)(3)(i) of this section, and the written plan for fugitive emission components designated as unsafe-to-monitor in accordance with 40 C.F.R. §60.5397a(g)(3)(ii).

e. Each monitoring survey shall observe each fugitive emissions component, as defined in §60.5430a, for fugitive emissions.

f. 1. You must conduct an initial monitoring survey within 60 days of the startup of production, as defined in §60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 60 days of the first day of production for each collection of fugitive emission components after the modification or by June 3, 2017, whichever is later.

2. You must conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification or by June 3, 2017, whichever is later.

g. A monitoring survey of each collection of fugitive emissions components at a well site or at a compressor station must be performed at the frequencies specified in 40 C.F.R. §§60.5397a(g)(1) and (2), with the exceptions noted in 40 C.F.R. §§60.5397a(g)(3) and (4).

1. A monitoring survey of each collection of fugitive emissions components at a well site within a company-defined area must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart.

2. A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

3. Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of 40 C.F.R. §§60.5397a(g)(3)(i) through (iv).

i. A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by 40 C.F.R. §§60.5397a(b), (c), and (d).

ii. The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.

iii. The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.

iv. The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

4. Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of 40 C.F.R. §§60.5397a(g)(4)(i) through (iv).

i. A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by 40 C.F.R. §§60.5397a(b), (c), and (d).

ii. The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.

iii. The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.

iv. The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

5. The requirements of 40 C.F.R. §60.5397a(g)(2) are waived for any collection of fugitive emissions components at a compressor station located within an area that has an average calendar month temperature below 0°Fahrenheit for two of three consecutive calendar months of a quarterly monitoring period. The calendar month temperature average for each month within the quarterly monitoring period must be determined using historical monthly average temperatures over the previous three years as reported by a National Oceanic and Atmospheric Administration source or other source approved by the Administrator. The requirements of 40 C.F.R. §60.5397a(g)(2) shall not be waived for two consecutive quarterly monitoring periods.

h. Each identified source of fugitive emissions shall be repaired or replaced in accordance with 40 C.F.R. §§60.5397a(h)(1) and (2). For fugitive emissions components also subject to the repair provisions of 40 C.F.R. §§60.5416a(b)(9) through (12) and (c)(4) through (7), those provisions apply instead to those closed vent system and covers, and the repair provisions of 40 C.F.R. §§60.5397a(h)(1) and (2) do not apply to those closed vent systems and covers.

1. Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.

2. If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.

3. Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.

   i. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.

   ii. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

   iii. Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in 40 C.F.R. §§60.5397a(h)(3)(iii)(A) and (B).

      A. A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 are used.

      B. Operators must use the Method 21 monitoring requirements specified in 40 C.F.R. §60.5397a(c)(8)(ii) or the alternative screening procedures specified in section 8.3.3 of Method 21.

   iv. Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in 40 C.F.R. §§60.5397a(h)(3)(iv)(A) and (B).

      A. A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.

      B. Operators must use the optical gas imaging monitoring requirements specified in 40 C.F.R. §60.5397a(c)(7).

i. Records for each monitoring survey shall be maintained as specified §60.5420a(c)(15).

j. Annual reports shall be submitted for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station that include the information specified in §60.5420a(b)(7). Multiple collection of fugitive emissions components at a well site or at a compressor station may be included in a single annual report.

[45CSR13, R13-1856, Condition 4.1.5; 45CSR16; 40 C.F.R. §60.5397a]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time**. Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months.
[45CSR13, R13-1856, Condition 3.2.1]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.
2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR13, R13-1856 Condition 4.4.1; 45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

When a person is found in violation of this rule, the Director may require the person to utilize a system to minimize fugitive particulate matter. This system to minimize fugitive particulate matter may include, but is not limited to, the following:

a. Use, where practicable, of water or chemicals for control of particulate matter in demolition of existing buildings or structures, construction operations, grading of roads or the clearing of land;

b. Application of asphalt, water or suitable chemicals on unpaved roads, material stockpiles and other surfaces which can create airborne particulate matter;

c. Covering of material transport vehicles, or treatment of cargo, to prevent contents from dripping, sifting, leaking or otherwise escaping and becoming airborne, and prompt removal of tracked material from roads or streets; or

d. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of materials, including adequate containment methods during sandblasting, abrasive cleaning or other similar operations.

[45CSR§17-3. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478	Associate Director Office of Air Enforcement and Compliance Assistance (3AP20) U. S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. During compliance certification, the facility shall certify that the facility burns natural gas in all stationary equipment regulated under this permit except, when applicable, for emergency equipment (i.e. diesel generators).
[45CSR§30-5.1.c.3.C.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. According to 45CSR§2-11.1 the boiler and heaters are exempt from the weight emission standards and MRR (monitoring, recordkeeping and reporting) because they are less than 10 mmBtu/hr.

b. 45CSR10; To Prevent and Control Air Pollution from the Emission of Sulfur Oxides: 45CSR10 is not applicable to the facility boiler and heaters because they are less than 10 mmBtu/hr.

c. 45CSR21; To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds: All storage tanks at Ceredo station are below 40,000 gallons in capacity, hence 45CSR§21-28 is not applicable. Ceredo station is not engaged in the extraction or fractionation of natural gas, hence, 45CSR§21-29 is not applicable.

d. 45CSR27; To Prevent and Control the Emissions of Toxic Air Pollutants: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.

e. 40 C.F.R. 60 Subpart Dc; Standards of Performance for Steam Generating Units: The boiler and heaters at this facility are less than 10 mmBtu/hr; hence, Subpart Dc is not applicable.

f. 40 C.F.R. 60 Subparts K, Ka; Standards of Performance for Storage Vessels for Petroleum Liquids: All tanks at Ceredo station are below 40,000 gallons in capacity.

g. 40 C.F.R. 60 Subpart Kb; Standards of Performance for Volatile Organic Liquid Storage Vessels: All tanks at Ceredo station are below 75m^3 in capacity.

h. 40 C.F.R. 60 Subpart KKK; Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant: Ceredo station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.

i. 40 C.F.R. 60 Subpart IIII; Standards of Performance for Stationary Compression Ignition Internal Combustion Engines: There are no compression ignition engines at this facility.

j. 40 C.F.R. 63 Subpart HHH; National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities: The facility does not have a glycol dehydration unit and is therefore not subject to the requirements of this subpart.

k. 40 C.F.R. 63 Subpart YYYY; Turbine MACT: The Solar Titan 250 (E10) is subject to 40 C.F.R. 63 Subpart YYYY. Per 40 C.F.R. §63.6095(d), there is a stay of standards for lean premix stationary combustion turbines until EPA takes final action to require compliance with this subpart. The only requirement for the unit is the initial notification requirement of 40 C.F.R. §63.6145, which was satisfied by the preconstruction permit application.

l. 40 C.F.R. 64 – None of the emission units have any add-on controls; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

4.0 Source Specific Requirements [emission point ID(s): BL2, H1, H2]

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. **[45CSR§2-3.1.]**

4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control. **[45CSR§2-3.2.]**

4.1.3. You must meet the work practice standard in 40 C.F.R 63 Subpart DDDDD Table 3 that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under 40 C.F.R. §63.7522.

If your unit is. . .	You must meet the following. . .
1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater **(H1, H2)**	Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.
2. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of less than 10 million Btu per hour in the unit designed to burn heavy liquid or unit designed to burn solid fuel subcategories; or a new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid **(BL2)**	Conduct a tune-up of the boiler or process heater biennially as specified in §63.7540.

If your unit is. . .	You must meet the following. . .
4. An existing boiler or process heater located at a major source facility, not including limited use units. **(H1)**	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575:
	a. A visual inspection of the boiler or process heater system.
	b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
	c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
	d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
	e. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
	f. A list of cost-effective energy conservation measures that are within the facility's control.
	g. A list of the energy savings potential of the energy conservation measures identified.
	h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[45CSR34; 40 C.F.R. §63.7500(a)(1), 40 C.F.R. 63 Subpart DDDDD Table 3]

4.1.4. At all times, you must operate and maintain any affected source (as defined in 40 C.F.R. §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40 C.F.R. §63.7500(a)(3)]

4.1.5. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 40 C.F.R. §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 40 C.F.R. §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 C.F.R. 63 subpart DDDDD, or the operating limits in Table 4 of 40 C.F.R. 63 subpart DDDDD.
[45CSR34; 40 C.F.R. §63.7500(e)]

4.1.6. For existing affected sources (as defined in 40 C.F.R. §63.7490), you must complete the initial compliance demonstrations, as specified in 40 C.F.R. §63.7510(a) through (d), no later than 180 days after the compliance date that is specified for your source in 40 C.F.R. §63.7495 and according to the applicable provisions in 40 C.F.R. §63.7(a)(2) as cited in 40 C.F.R. 63 Subpart DDDDD Table 10, except as specified in 40 C.F.R. §63.7510(j). You must complete an initial tune-up by following the procedures described in 40 C.F.R. §§63.7540(a)(10)(i) through (vi) no later than the compliance date specified in 40 C.F.R. §63.7495, except as specified in 40 C.F.R. §63.7510(j). You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in 40 C.F.R. §63.7495.
[45CSR34; 40 C.F.R. §63.7510(e)](H1)

4.1.7. For new or reconstructed affected sources (as defined in 40 C.F.R. §63.7490), you must demonstrate initial compliance with the applicable work practice standards in 40 C.F.R. 63 Subpart DDDDD Table 3 within the applicable annual, biennial, or 5-year schedule as specified in 40 C.F.R. §63.7515(d) following the initial compliance date specified in 40 C.F.R. §63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 C.F.R. §63.7515(d).
[45CSR34; 40 C.F.R. §63.7510(g)](H2 and BL2)

4.1.8. If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to 40 C.F.R. §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in 40 C.F.R. §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in 40 C.F.R. §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in 40 C.F.R. §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in 40 C.F.R. §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.
[45CSR34; 40 C.F.R. §63.7515(d)]

4.1.9. If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour (except as specified in 40 C.F.R. §63.7540(a)(12)), you must conduct a biennial tune-up of the boiler or process heater as specified in 40 C.F.R §63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance.
[45CSR34; 40 C.F.R. §63.7540(a)(11)](BL2)

4.1.10. If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs 40 C.F.R. §63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph 40 C.F.R. §63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If an oxygen

trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. These tune-ups shall consist of the following:

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject;

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

f. Maintain on-site and submit, if requested by the Administrator, a report containing the following information:

   i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

   ii. A description of any corrective actions taken as a part of the tune-up; and

   iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[45CSR34; 40 C.F.R. §§63.7540(a)(10) & (a)(12)]

4.1.11. The Heater, identified as H2, shall operate according to the following requirements:

a. The MDHI shall not exceed 1.00 mmBtu/hr and the unit shall only be fired by natural gas;

b. As the annual emission limits given in table 4.1.11(c) are based on operating 8,760 hours/year, there is no limit on the annual hours of operation or fuel usage of the Heater.

c. The maximum combustion exhaust emissions from the Heater shall not exceed the limits given in the following table;

Table 4.1.11.c: Heater Emission Limits

Pollutant	PPH	TPY
CO	0.08	0.36
NO_x	0.10	0.43

d. **45CSR2**
No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

e. **40 C.F.R. 63 Subpart DDDDD**
Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.
[45CSR34, 40 C.F.R. §63.7500(e)]

[45CSR13, R13-1856, Condition 4.1.4](H2)

4.2. Monitoring Requirements

4.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 for the purpose of demonstrating compliance with Section 4.1.1. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.
[45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. At such reasonable times(s) as the Secretary may designate, in accordance with the provisions of 3.3.1 of this permit, the permittee shall conduct of have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.
[45CSR13, R13-1856, Condition 4.3.1](H2)

4.4. Recordkeeping Requirements

4.4.1. You must keep records of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).
[45CSR34; 40 C.F.R. §63.7555(a)(1)]

4.4.2. In what form and how long must I keep my records?

a. Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).

b. As specified in 40 C.F.R.§63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

c. You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[45CSR34; 40 C.F.R. §63.7560]

4.5. Reporting Requirements

4.5.1. You must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to 40 C.F.R. 63 Subpart DDDDD Table 3, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. **[45CSR34; 40 C.F.R. §63.7530(e)](H1)**

4.5.2. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in40 C.F.R. §63.7545(e).
[45CSR34; 40 C.F.R. §63.7530(f)]

4.5.3. If you are not required to conduct an initial compliance demonstration as specified in 40 C.F.R. §63.7530(a), the Notification of Compliance Status must only contain the information specified in 40 C.F.R. §§63.7545(e)(1) and (8) and must be submitted within 60 days of the compliance date specified at 40 C.F.R. §63.7495(b).

a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

b. In addition to the information required in 40 C.F.R. §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in 40 C.F.R. §63.7540(a)(10)(i) through (vi)."

ii. "This facility has had an energy assessment performed according to §63.7530(e)."

iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."

[45CSR34; 40 C.F.R. §63.7545(e)(1) and (8)]

4.5.4. Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph 40 C.F.R. §63.7550(h), by the date in 40 C.F.R. 63 Subpart DDDDD Table 9 and according to the requirements in 40 C.F.R. §§63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in 40 C.F.R. §§63.7550(b)(1) through (4), instead of a semi-annual compliance report.
[45CSR34; 40 C.F.R. §63.7550(b)]

4.5.5. For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in 40 C.F.R. §§63.7550(b)(1) through (4).
[45CSR34; 40 C.F.R. §63.7550(b)(5)]

4.5.6. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

a. Company and Facility name and address.

b. Process unit information, emissions limitations, and operating parameter limitations.

c. Date of report and beginning and ending dates of the reporting period.

d. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 C.F.R. §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[45CSR34; 40 C.F.R. §§63.7550(c), (c)(1), (c)(5)(i)-(iii), (c)(5)(xiv), and (c)(5)(xvii)]

4.6. Compliance Plan

4.6.1. None.

5.0 Source Specific Requirements [emission point ID(s): E01, E02, E03, E04, E05, E06, E07, G3, G4]

5.1. Limitations and Standards

5.1.1. The following stationary RICE do not have to meet the requirements of 40 C.F.R. 63 subpart ZZZZ and of subpart A, including initial notification requirements:

a. Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

[45CSR34, 40 C.F.R. §63.6590(b)(3)(i)](E01, E02, E03, E04, E05, E06, E07)

5.1.2. If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to 40 C.F.R. 63 subpart ZZZZ or operating limitations in Tables 1b and 2b to 40 C.F.R. 63 subpart ZZZZ: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.
[45CSR34, 40 C.F.R. §63.6600(c)](E01, E02, E03, E04, E05, E06, E07, G3, G4)

5.1.3. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 C.F.R. §§63.6640(f)(1) through (3). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 C.F.R. §§63.6640(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs 40 C.F.R. §§63.6640(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

a. There is no time limit on the use of emergency stationary RICE in emergency situations.

b. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 C.F.R. §§63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs 40 C.F.R. §63.6640(f)(3) counts as part of the 100 hours per calendar year allowed by this 40 C.F.R. §63.6640(f)(2).

i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see

§63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

c. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 C.F.R. §63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34; 40 C.F.R. §§63.6640(f)(1) through (3)](G3 and G4)

5.1.4. The Emergency Generators (EGs), Identified as 005G3 and 005G4, shall meet the following requirements:

a. The authorized EGs shall each be the make, model, and size as specified under Table 1.1, shall only be fired by pipeline-quality natural gas, and each shall not operate in excess of 500 hours per year (during periods of non-emergencies);

b. The maximum emissions from the Waukesha F3521GL Emergency Generator, identified as 005G3, shall not exceed the limits given in the following table:

Pollutant	PPH	TPY
CO	4.31	1.08
NO_X	2.44	0.61
VOC	1.63	0.41
Formaldehyde	0.31	0.08

c. The maximum emissions from the Waukesha VGFL36GL Emergency Generator, identified as 005G4, shall not exceed the limits given in the following table:

Pollutant	PPH	TPY
CO	7.76	1.94
NO_X	3.88	0.97
VOC	1.94	0.49
Formaldehyde	0.37	0.09

d. **<u>40 C.F.R 60, Subpart JJJJ</u>**
The Waukesha VGFL36GL identified as 005G4 shall meet all applicable requirements under 40 C.F.R. 60, Subpart JJJJ including the following:

(1) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in 40 C.F.R. 60, Subpart JJJJ Table 1 for their stationary ICE

Engine type and fuel	Maximum Engine Power	Manufacture Date	Emission Standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_x	CO	VOC[d]	NO_x	CO	VOC[d]
Emergency	HP≥130	1/1/2009	2.0	4.0	1.0	160	540	86

[a] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15% O_2.
[b] For Purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.
[45CSR16, 40 C.F.R. §60.4233(e), 40 C.F.R. 60 subpart JJJJ Table 1]

(2) The emergency generator shall meet the definition of "Emergency Stationary Internal Combustion Engine" as given under 40 C.F.R. §60.4248.
[45CSR16, 40 C.F.R. §60.4248]

[45CSR13, R13-1856, Condition 4.1.3.]

5.1.5. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.
[45CSR16, 40 C.F.R. §60.4234](G4)

5.1.6. Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
[45CSR16, 40 C.F.R. §60.4237(a)](G4)

5.1.7. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in 40 C.F.R. §60.4243(b)(1) and (2).

a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according 40 C.F.R. §60.4243(b)(2)(i).

i. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[45CSR16, 40 C.F.R. §§60.4243(b), (b)(2), & (b)(2)(ii)](G4)

5.1.8. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in 40 C.F.R. §§60.4243(d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 C.F.R. §§60.4243(d)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 C.F.R. §§60.4243(d)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

a. There is no time limit on the use of emergency stationary ICE in emergency situations.

b. You may operate your emergency stationary ICE for any combination of the purposes specified in in 40 C.F.R. §§60.4243(d)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by in 40 C.F.R. §60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by this in 40 C.F.R. §60.4243(d)(2).

   i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

   ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

   iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 C.F.R. §60.4243(d)(2). Except as provided in 40 C.F.R. §60.4243(d)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

   i. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

   ii. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

   iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

   iv. The power is provided only to the facility itself or to support the local transmission and distribution system.

v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR16, 40 C.F.R. §60.4243(d)](G4)

5.2. Monitoring Requirements

5.2.1. For the purposes of demonstrating compliance with the maximum hours of operation limits set forth in 5.1.3.a, the permittee shall maintain monthly and rolling twelve month records of the hours of operation of the emergency generators.
[45CSR13, R13-1856, Condition 4.2.2.]

5.3. Testing Requirements

5.3.1. For the purposes of demonstrating compliance with the emissions standards of 5.1.4.c and 40 C.F.R. §60.4233(e), the permittee shall conduct an initial performance test within one year after initial startup. After the initial test, subsequent testing shall be conducted every 8,760 hours of operation or 3 years, whichever comes first. If the engine is not operational, the permittee must conduct the performance test immediately upon startup of the engine. These tests must be conducted within 10 percent of the 100 percent peak (or highest achievable) load and according to the requirements of §60.8, under the specific conditions that are specified by Table 2 of Subpart JJJJ of Part 60 – Requirements for Performance test, and in accordance with Condition 3.3.1. of this permit. Records of such testing shall be maintained in accordance with Condition 3.4.1 of this permit.
[45CSR13, R13-1856, Condition 4.3.2.b](G4)

5.3.2. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in 40 C.F.R. §§60.4244(a) through (f).

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

c. You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.192 \times 10^{-3} \times Q \times T}{HP-hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.
C_d = Measured NO_X concentration in parts per million by volume (ppmv).
1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP-hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.
C_d = Measured CO concentration in ppmv.
1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

f. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP-hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.
C_d = VOC concentration measured as propane in ppmv.
1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

g. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \quad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.
C_{Mi} = Measured concentration of compound i in ppmv as carbon.
C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \quad \text{(Eq. 5)}$$

Where:
C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.
C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \quad \text{(Eq. 6)}$$

Where:
CPeq = Concentration of compound i in mg of propane equivalent per DSCM.

[45CSR16, 40 C.F.R. §60.4244](G4)

5.4. Recordkeeping Requirements

5.4.1. Owners and operators of all stationary SI ICE must keep records of the following information:

a. All notifications submitted to comply with 40 C.F.R. 60 subpart JJJJ and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[45CSR16, 40 C.F.R. §60.4245(a)](G4)

5.4.2. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[45CSR16, 40 C.F.R. §60.4245(b)](G4)

5.5. Reporting Requirements

5.5.1. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
[45CSR34, 40 C.F.R. §63.6645(f)](G4)

5.6. Compliance Plan

5.6.1. None.

6.0 Source Specific Requirements [emission point ID(s): E10]

6.1. Limitations and Standards

6.1.1. The Solar Titan 250 combustion turbine (CT), identified as 00510, shall meet the following requirements:

a. The authorized CT shall be the make, model, and size as specified under Table 1.1 and shall only be fired by pipeline-quality natural gas;

b. With the exception of operation during "low-temperature mode" and low-load mode" as defined under 6.2.1(a), at all times the CT is in operation, the unit shall utilize $SoLoNO_x$ dry low-NO_x combustor technology;

c. The CT shall be fired using good combustion practices;

d. The maximum emissions from the CT shall not exceed the limits (during specific operational scenarios) as given in the following table:

Pollutant	PPH		TPY
	Normal[(1)]	Low-Load	
CO	12.06	7.25	54.65
NO_x	7.93	23.84	35.67
$PM_{2.5}/PM_{10}/PM$	1.47	n/a	6.44
SO_2	12.71	n/a	0.70
VOC	1.38	0.66	6.03
Formaldehyde	0.16	n/a	0.69

[(1)] Emission limit valid for temperatures ≥ 32°F

e. The CT shall meet all applicable requirements under 40 C.F.R. 60 Subpart KKKK including the following:

(i) You must meet the emission limits for NO_x specified in Table 1 to this subpart.

Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines

Combustion turbine type	Combustion turbine heat input at peak load (HHV)	NO_x emission standard
New turbine firing natural gas	>50 MMBtu/h and ≤850 MMBtu/h	25 ppm at 15 percent O_2 or 150 ng/J of useful output (1.2 lb/MWh).

[45CSR16, 40 C.F.R. §60.4320(a), 40 C.F.R. 60, Subpart KKKK Table 1]

(ii) If your turbine is located in a continental area, you must comply with either paragraph 40 C.F.R. §§60.4330(a)(1), (a)(2), or (a)(3). **[45CSR16, 40 C.F.R §60.4330(a)]**

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of 110 nanograms per Joule (ng/J)

(0.90 pounds per megawatt-hour (lb/MWh)) gross output; **[45CSR16, 40 C.F.R §60.4330(a)(1)]**

(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. **[45CSR16, 40 C.F.R §60.4330(a)(2)]**

[45CSR13, R13-1856, Condition 4.1.2]

6.1.2. **Operation and Maintenance or Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all air pollution control equipment listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-1856, Condition 4.1.6]

6.1.3. The permittee must operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
[45CSR16, 40 C.F.R §60.4333(a)]

6.1.4. If you are not using water or steam injection to control NO_X emissions, you must perform annual performance tests in accordance with 40 C.F.R. §60.4400 to demonstrate continuous compliance. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests.
[45CSR16, 40 C.F.R §60.4340(a)]

6.2. Monitoring Requirements

6.2.1. The Solar Titan 250 CT shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements:

a. The permittee shall monitor and record the monthly amount of hours the CT operates in the following modes:

(i) Normal Mode = Load ≥ 40%, Temperature > -20°F: $SoLoNO_x$ operating;

(ii) Low-Temperature Mode = Temperature ≤ -20°F: non-$SoLoNO_x$ mode; and

(iii) Low-Load Mode = Load ≤ 40% (includes startup/shutdown events): non-$SoLoNO_x$ mode.

b. To determine compliance with the CT annual emission limits given in 6.1.1.d, the permittee shall calculate the monthly and twelve month rolling average of actual emissions (in tons) that the CT emitted. The calculation of actual monthly and annual emissions shall be in accordance with the following:

(i) The permittee shall, by the 15th of each calendar month, calculate the actual monthly and rolling twelve month total of emissions of the CT using the data recorded under 6.2.1.a and the best available emission factors in accordance with the following requirements:

(1) Emission factors may be used that were measured during the most recent performance test approved by the Secretary (and that were used to determine compliance with the hourly limits given in 6.1.1.d);

(2) When emission factors as described under 6.2.1.b.(i)(1) are not available, the permittee shall use the emission factors used to calculate the potential-to-emit of the CT as given in Permit Application R13-1856A.

c. **40 C.F.R. 60, Subpart KKKK**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb/MMBtu) heat input for units located in continental areas and 180 ng SO_2/J (0.42 lb/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(i) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.04 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas and has potential sulfur emissions of less than 180 ng SO_2/J (0.42 lb SO_2/MMBtu) heat input for noncontinental areas; or

(ii) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas or 180 ng SO_2/J (0.42 lb SO_2/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

[45CSR16, 40 CFR §60.4365]

[45CSR13, R13-1856, Condition 4.2.1]

6.2.2. If you elect not to demonstrate sulfur content using options in 40 C.F.R. §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.
[45CSR16, 40 CFR§ 60.4370(b)]

6.3. Testing Requirements

6.3.1. The permittee shall meet the following testing requirement with respect to the Solar Titan 250 CT:

a. For the purposes of demonstrating compliance with the NO_X emission standard in condition 6.1.1.e and 40 C.F.R. §60.4320(a) the permittee shall conduct an initial performance test within 60 days after achieving maximum output of each turbine, but no later than 180 days after initial startup. After the initial test, subsequent performance testing shall be conducted annually (no more than 14 months following the previous test) unless the previous results demonstrate that the affected units achieved compliance of less than or equal to 75 percent of the NO_X emission limit, then the permittee may reduce

the frequency of subsequent tests to once every two years (no more than 26 calendar months following the previous test) as allowed under 40 C.F.R. §60.4320(a). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit, then the permittee must resume annual performance tests. Such testing shall be conducted in accordance with Condition 3.3.1. and 40 C.F.R. §60.4400. Records of such testing shall be maintained in accordance with Condition 3.4.1.

[45CSR13, R13-1856, Condition 4.3.2.a]

6.3.2. You must conduct an initial performance test, as required in §60.8. Subsequent NOX performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

a. There are two general methodologies that you may use to conduct the performance tests. For each test run:

i. Measure the NO_X concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

$$E = \frac{(1.194 \times 10^{-7}) \times (NO_X)_C \times Q_{std}}{P}$$

Where:
E = NO_X emission rate, in lb/MWh
1.194 × 10−7 = conversion constant, in lb/dscf-ppm
$(NO_X)_c$ = average NOX concentration for the run, in ppm
Q_{std} = stack gas volumetric flow rate, in dscf/hr
P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

ii. Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_X emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_X emission rate in lb/MWh.

b. Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

c. Notwithstanding 40 C.F.R. §60.4400(a)(2), you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met

i. You may perform a stratification test for NOX and diluent pursuant to the procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

ii. Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

A. If each of the individual traverse point NO_X concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO_2 (or O_2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_X concentration during the stratification test; or

B. For turbines with a NO_X standard greater than 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points; or

C. For turbines with a NO_X standard less than or equal to 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO_2 (or O_2) from the mean for all traverse points.

[45CSR16, 40 C.F.R. §60.4400(a)]

6.3.3. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

a. If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

b. For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.

c. If water or steam injection is used to control NO_X with no additional post-combustion NO_X control and you choose to monitor the steam or water to fuel ratio in accordance with §60.4335, then that monitoring system must be operated concurrently with each EPA Method 20 or EPA Method 7E run and must be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.4320 NO_X emission limit.

d. Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in §60.4320.

e. If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

f. The ambient temperature must be greater than 0 °F during the performance test.

[45CSR16, 40 C.F.R. §60.4400(b)]

6.4. Recordkeeping Requirements

6.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-1856, Condition 4.4.2]

6.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future reoccurrences of the malfunction.

[45CSR13, R13-1856, Condition 4.4.3]

6.5. Reporting Requirements

6.5.1. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime,

in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
[45CSR16, 40 C.F.R §60.4375(a)]

6.5.2. For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.
[45CSR16, 40 C.F.R §60.4375(b)]

6.6. Compliance Plan

6.6.1. None.

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Randy C. Huffman, Cabinet Secretary

ENGINEERING EVALUATION / FACT SHEET

(revised 8/30/16)

BACKGROUND INFORMATION

Application No.:R13-1856A

Plant ID No.:	099-00013
Applicant:	Columbia Gas Transmission, LLC
Facility Name:	Ceredo Compressor Station
Location:	Near Ceredo, Wayne County
SIC/NAICS Code:	4922/486210
Application Type:	Modification
Received Date:	May 11, 2016
Engineer Assigned:	Joe Kessler
Fee Amount:	$2,000
Date Received:	May 12, 2016
Complete Date:	June 8, 2016
Due Date:	September 6, 2016
Applicant Ad Date:	May 5, 2016
Newspaper:	*The Herald-Dispatch*
UTM's:	366.1 km Easting • 4,247.7 km Northing • Zone 17
Latitude/Longitude:	38.36877/-82.53238
Description:	Request to: (1) replace two (2) existing grandfathered combustion turbines (E08 and E09) with one (1) new 30,399 horsepower (hp) Solar Titan 250 combustion turbine, (2) to install one (1) 880 hp Waukesha VGF L36GL emergency generator, and (3) install one (1) additional 1.0 mmBtu/hr process heater.

Columbia Gas Transmission, LLC's (CGT) Ceredo Compressor Station was constructed in the early 1950's and was, therefore, at the time the minor and major source permitting rules (45CSR13 and 45CSR14) were promulgated, considered a grandfathered source. However, since that time the station has undergone one modification that did require a permit under 45CSR13. On July 17, 1995, R13-1856 was issued to CGT for the installation of a 738 hp auxiliary generator. This is the only emission source at the existing facility operating under a

New Source Review (NSR) permit. Several "no permit needed" determinations have also been made for various auxiliary equipment added to the facility.

DESCRIPTION OF PROCESS/MODIFICATIONS

Existing Facility Description

CGT's Ceredo Station is located near Ceredo, Wayne County, WV. The station receives natural gas via pipeline from an upstream compressor station, compresses it using natural gas-fired turbines and reciprocating internal combustion engines (RICE) and then transmits it via pipeline to a downstream station. The station currently consists of:

- Six (6) 2,800 hp natural gas-fired Cooper-Bessemer GMWH-8 2-stroke lean burn (2SLB) compressor engines (installed from 1954 through 1960);
- One (1) 2,700 hp natural gas-fired Cooper-Bessemer 8V-250 2-stroke lean burn (2SLB) compressor engine (installed in 1965);
- One (1) 10,200 hp natural gas-fired General Electric 3912R combustion turbine (installed in 1967); and
- One (1) 12,500 hp natural gas-fired General Electric 3112R combustion turbine (installed in 1971).

Auxiliary equipment at the facility includes one (1) 738 hp natural gas-fired Waukesha F3521GL emergency generator, one (1) 0.35 mmBtu/hr natural gas-fired fuel gas heater, one (1) 6.276 mmBtu/hr natural gas-fired boiler, and numerous storage tanks for various low vapor pressure liquids.

Proposed Modifications

CGT is now proposing to modify the Ceredo Compressor Station by:

- Adding a new natural gas-fired 30,399 hp, 222.67 mmBtu/hr (HHV), Solar Titan 250 combustion turbine (00510) to replace the two existing combustion turbines: the 10,200 hp natural gas-fired General Electric 3912R unit (installed in 1967) and the 12,500 hp natural gas-fired General Electric 3112R unit (installed in 1971);
- Adding a new 880 hp Waukesha VGF L36GL emergency generator;
- Adding a new 1.0 mmBtu/hr process heater; and
- Quantifying of facility-wide fugitive emissions.

The new combustion turbine will be equipped with advanced dry-low-NO_x combustion controls, known by the manufacturer as SoloNO_x. These controls reduce NO_x and peak combustion temperatures through the use of a lean, premixed air/fuel mixture and advanced combustion controls. The SoloNO_x system is operational at turbine loads from approximately 40% to 100% of full load. During operation at low turbine loads (<40% of full load), low ambient temperatures (<-20℉), and during turbine startup and shutdown, supplemental pilot fuel

is fired for flame stability and results in $_{Nox}$, CO, and VOC concentrations that are higher than during SoloNO$_x$ operation.

SITE INSPECTION

Due to the nature of the proposed modification, the author did not perform a site inspection of the facility for this permitting action. The facility was last inspected by DAQ Compliance/ Enforcement (C/E) Inspector Mr. Todd Shrewsbury on February 12, 2016. This inspection found the facility be "Status 30 - In Compliance."

AIR EMISSIONS AND CALCULATION METHODOLOGIES

CGT provided calculations of the post-modification facility-wide potential-to-emit (PTE) in Attachment N of the permit application. The following will only summarize the air emissions and calculation methodologies of the emission sources being added or modified as part of this permitting action.

Solar Titan 250 Combustion Turbine

Potential emissions from the new natural gas-fired 30,399 hp, 222.67 mmBtu/hr (HHV), Solar Titan 250 combustion turbine (E10) are based on emission factors provided from the vendor, based on the emission factors provided for natural gas combustion as given in AP-42 Section 3.1. (AP-42 is a database of emission factors maintained by USEPA), and on a material balance equation. Potential emissions from the combustion turbine are generated from three different operating scenarios: normal, low temperature (t < -20°F), and low-load (load < 40%). The latter two scenarios represent times when the SoloNO$_x$ system is not operational. However, as the time of operation of the turbine below -20°F is expected to be extremely rare, it was not considered in the calculation of the PTE.

Hourly emissions were, where appropriate, based on operation of the CT at temperatures ≥32°F and annual emissions were based on operation of the turbine for approximately 100 hours/year in low-load mode. The following table details the emission factor source and the PTE of the combustion turbine:

Table 1: Solar Titan 250 Combustion Turbine PTE

Pollutant	Emission Factor	Source	Hourly (lb/hr)	Annual (ton/yr)
CO[(1)]	0.060 lb/mmBtu (normal)	Vendor Data	12.06	54.65
	25 ppm (low-load)		7.25	
NO$_X$[(1)]	0.039 lb/mmBtu	Vendor Data	7.93	35.67
	50 ppm (low-load)		23.84	
$PM_{2.5}/PM_{10}/PM$	0.0066 lb/mmBtu	AP-42, Section 3.1	1.47	6.44
SO_2	0.0571 lb/mmBtu 0.000714 lb/mmBtu	20 grains S/100 scf (hourly) 0.25 grains S/100 scf (yearly)	12.71	0.70

Pollutant	Emission Factor	Source	Hourly (lb/hr)	Annual (ton/yr)
VOCs(1)	0.007 lb/mmBtu (normal)	Vendor Data	1.38	6.03
	4 ppm (low-load)		0.66	
Formaldehyde	0.00071 lb/mmBtu	AP-42, Section 3.1	0.16	0.69
Total HAPs	0.00102 lb/mmBtu	AP-42, Section 3.1	0.23	1.00

Pollutant	Emission Factor	Source	Hourly (lb/hr)	Annual (ton/yr)
CO(1)	0.060 lb/mmBtu (normal)	Vendor Data	12.06	54.65
	25 ppm (low-load)		7.25	
NO_X(1)	0.039 lb/mmBtu	Vendor Data	7.93	35.67
	50 ppm (low-load)		23.84	
$PM_{2.5}/PM_{10}/PM$	0.0066 lb/mmBtu	AP-42, Section 3.1	1.47	6.44
SO_2	0.0571 lb/mmBtu 0.000714 lb/mmBtu	20 grains S/100 scf (hourly) 0.25 grains S/100 scf (yearly)	12.71	0.70
VOCs(1)	0.007 lb/mmBtu (normal)	Vendor Data	1.38	6.03
	4 ppm (low-load)		0.66	
Formaldehyde	0.00071 lb/mmBtu	AP-42, Section 3.1	0.16	0.69
Total HAPs	0.00102 lb/mmBtu	AP-42, Section 3.1	0.23	1.00

(1) CO, NO_x, and VOC annual emissions reflect aggregate emissions from various operating modes. Normal emission factor is for steady-state operation at 32 ℉. Vendor data given in ppmvd @ 15% O_2: CO - 25 ppm, NO_x - 10 ppm, VOC - 5 ppm (20% of UHC emission factor) and converted to lb/mmBtu for normal operation.

Emergency Generator

Potential emissions from the new 880 hp Waukesha VGF L36GL emergency generator (G4) were based on emission factors provided by the engine vendor, as given in AP-42, Section 3.2., and on the applicable 40 CFR 60, Subpart JJJJ limitation. Hourly emissions were based on the (as calculated using a fuel heat rating of 7,757 Btu/hp-hr) maximum design heat input (MDHI) of the engine of 6.83 mmBtu/hr and the maximum hp rating. Annual emissions were based on 500 hours of operation per year. The following table details the PTE of the compressor engine:

Table 2: Waukesha VGF L36GL Emergency Generator PTE

Pollutant	Emission Factor	Source	Hourly (lb/hr)	Annual (ton/yr)
CO	4.00 g/hp-hr	40 CFR 60, Subpart JJJJ	7.76	1.94
NO_X	2.00 g/hp-hr	40 CFR 60, Subpart JJJJ	3.88	0.97
$PM_{2.5}/PM_{10}/PM^{(1)}$	9.91×10^{-3} lb/mmBtu	AP-42, Table 3.2-2	0.07	0.02
SO_2	5.71×10^{-2} lb/mmBtu (hourly) 7.1×10^{-4} lb/mmBtu (annual)	20 gr-S/100 scf (hourly) 0.25 gr-S/100 scf (annual)	0.39	<0.01
VOCs	1.00 g/hp-hr	40 CFR 60, Subpart JJJJ	1.94	0.49
Total HAPs	Various	AP-42, Table 3.2-2	0.50	0.13
Formaldehyde	0.19 g/hp-hr	Engine Vendor	0.37	0.09

(1) Includes condensables.

Heater Emissions

Combustion emissions from the new 1.0 mmBtu/hr process heater (H2) were based on the emission factors provided for natural gas combustion as given in AP-42 Section 1.4. Hourly emissions were based on the MDHI of the unit and annual emissions were based on an annual operation of 8,760 hours. A natural gas heat content value of 1,020 Btu/ft^3 was used in the calculations.

Post-Modification Facility-Wide Emissions

The following table details the proposed post-modification facility-wide emissions of the Ceredo Compressor Station.

Table 3: Facility-Wide Post-Modification Annual (ton/yr) Emissions

Source	CO	NO_x	$PM^{(1)}$	SO_2	VOCs	HAPs
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19
Cooper-Bessemer GMWH-8 Engine	35.08	491.79	4.98	0.07	12.36	8.19

Cooper-Bessemer 8V-250 Engine	39.03	591.30	4.46	0.07	11.07	7.34
Solar Titan 250 Turbine	54.65	35.67	6.44	0.70	6.03	1.00
Waukesha Emergency Generator 3	1.08	0.61	0.01	<0.01	0.41	0.11
Waukesha Emergency Generator 4	1.94	0.97	0.02	<0.01	0.49	0.13
Fuel Gas Heater H1	0.13	0.15	0.01	<0.01	0.01	0.01
Process Heater H2	0.36	0.43	0.03	<0.01	0.02	0.01
Heating System Boiler BL2	2.26	2.69	0.20	0.02	0.15	0.05
Fugitives	0.00	0.00	0.00	0.00	4.37	0.00
Facility-Wide Totals ➔	**309.93**	**3,582.56**	**41.05**	**1.25**	**96.71**	**57.79**

(1) All particulate matter emissions are assumed to be less than 2.5 microns. Includes condensables.

Facility-Wide Emissions Increase

The following table lists the increase in facility-wide emissions at the Ceredo Compressor Station:

Table 4: Change in Facility-Wide Post-Modification Annual (ton/yr) Emissions

Source	CO	NO_x	PM(1)	SO_2	VOCs	HAPs
R13-1856	313.99	4,077.00	40.59	1.18	87.73	57.60
R13-1856A	309.93	3,582.56	41.05	1.25	96.71	57.79
Change in Emissions ➔	**(4.06)**	**(494.44)**	**0.46**	**0.07**	**8.98**	**0.19**

(1) All particulate matter emissions are assumed to be less than 2.5 microns. Includes condensables.

REGULATORY APPLICABILITY

This section will address the potential regulatory applicability/non-applicability of substantive state and federal air quality rules relevant to the emission units/sources added or modified at the Ceredo Compressor Station.

45CSR2: To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers (Non-Applicable)

Pursuant to the definition of "fuel burning unit" under 45CSR2 ("producing heat or power by indirect heat transfer"), 45CSR2 does not apply to the combustion turbine. However, the 1.0 mmBtu/hr natural gas-fired process heater has been determined to meet the definition of a "fuel burning unit" under 45CSR2 and is, therefore, subject to the applicable requirements therein. However, pursuant to the exemption given under §45-2-11, as the MDHI of the heater is less than 10 mmBtu/hr, the unit is not subject to sections 4, 5, 6, 8 and 9 of 45CSR2. The only

remaining substantive requirement is under Section 3.1 - Visible Emissions Standards.

Pursuant to 45CSR2, Section 3.1, the heater is subject to an opacity limit of 10%. Proper maintenance and operation of the unit (and the use of natural gas as fuel) should keep the opacity of the unit well below 10% during normal operations.

45CSR10: To Prevent and Control Air Pollution from the Emission of Sulfur Oxides (Non-Applicable)

45CSR10 has requirements limiting SO_2 emissions from "fuel burning units," limiting in-stack SO_2 concentrations of "manufacturing processes," and limiting H_2S concentrations in process gas streams. Pursuant to the definition of "fuel burning unit" under 45CSR10 ("producing heat or power by indirect heat transfer"), the limitations on fuel burning units under 45CSR10 do not apply to the combustion turbines. The proposed heater is defined as a "fuel burning unit" and subject to the applicable requirements discussed below. However, pursuant to the exemption given under §45-10-10.1, as the MDHI of the heater is less than 10 mmBtu/hr, the unit is not subject to the limitations on fuel burning units under 45CSR10.

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification of the Ceredo Compressor Station does not have the potential to increase the emissions of a regulated pollutant in excess of the thresholds that would, pursuant to §45-13-2.17, define the changes as a "modification" under 45CSR13. Therefore, the proposed changes would normally be eligible to be reviewed as a Class II Administrative Update. However, CGT voluntarily submitted the application as a modification and it was reviewed as such. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct."

As required under §45-13-8.3 ("Notice Level A"), CGT placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on May 5, 2016 in *The Herald-Dispatch* and the affidavit of publication for this legal advertisement was submitted on May 25, 2016.

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration (Non-Applicability)

The Ceredo Compressor Station is an existing major stationary source under 45CSR14 and the proposed installation of the new combustion turbine, emergency generator, and process heater are considered, pursuant to §45-14-2.40, a "*physical change* or a change in the method of operation." Therefore, to determine if the project is defined as a "major modification," pursuant to §45-14-3.4(a), the project is examined under a two-step applicability test: "[A] project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases -- a significant emissions increase (as defined in subsection [§45-14-2.75]), and a significant net emissions increase (as defined in subsections [§45-14-2.46] and [§45-14-2.74]). The proposed project is not a major modification if it does not cause a significant emissions increase. If the proposed project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase."

Therefore, for the proposed changes to meet the definition of a major modification, the changes themselves must result in a significant emissions increase. The methodology for calculating the emissions increase under the first step is given under Sections §45-14-3.4(b), 3.4(c), 3.4(d) and 3.4(f). The substantive language relevant to the changes evaluated herein is given below:

> [§45-14-3.4(b)]
> The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to subdivisions 3.4.c through 3.4.f.
>
> [§45-14-3.4(d)]
> Actual-to-potential test for projects that only involve construction of a new emissions unit(s). -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in subsection 2.58) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in subdivision 2.8.c) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

The total PTE associated with the proposed installation of the new combustion turbine, emergency generator, and process heater are given in the following table:

Table 5: PTE From Installation of New Equipment

Source	CO	NO_x	PM(1)	SO_2	VOCs
Solar Titan 250 Turbine	54.65	35.67	6.44	0.70	6.03
Waukesha Emergency Generator 4	1.94	0.97	0.02	<0.01	0.49
Process Heater H2	0.36	0.43	0.03	<0.01	0.02
Physical Change Totals ➔	**56.95**	**37.07**	**6.49**	**0.72**	**6.54**

(1) All particulate matter emissions are assumed to be less than 2.5 microns. Includes condensables.

Therefore, the aggregate PTE from this project's emissions is less than the significant thresholds that would the define the project as a "major modification" under §45-14-2.74 and 45CSR14 does not apply.

45CSR30: Requirements for Operating Permits

45CSR30 provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act. The Ceredo Compressor Station, defined under Title V as a "major source," was last issued a Title V permit on October 31, 2012. Proposed changes evaluated herein must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

40 CFR 60, Subpart KKKK: Standards of Performance for Stationary Combustion Turbines

40 CFR 60 Subpart KKKK is the New Source Performance Standard (NSPS) for stationary

combustion turbines of greater than 10 mmBtu/hr and that which commenced construction, modification, or reconstruction after February 18, 2005. Subpart KKKK contains within it emission standards, compliance methods, monitoring requirements, and reporting and record-keeping procedures for affected facilities applicable to the rule. The following discusses the applicable substantive requirements of Subpart KKKK relating to the Solar Titan 250 combustion turbine.

Pursuant to §60.4305(a), Subpart KKKK applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 mmBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. Therefore, the 222.67 mmBtu/hr (HHV) natural gas-fired Solar Titan 250 combustion turbine is subject to 40 CFR 60, Subpart KKKK.

Section §60.4320 requires affected facilities to meet NO_x emission standards given under Table 1 of the Subpart. Therefore, as a new turbine firing natural gas less between 50 mmBtu/hr and 850 mmBtu/hr, pursuant to Table 1, CGT has to meet a NO_x limit of 25 ppm at 15% O_2 or 1.2 lb/MW-hr gross energy output. CGT has provided vendor data showing a NO_x emission rate of 10 ppm at 15% O_2.

Section §60.4330(a) requires that a stationary combustion turbine located in a continental area meet either: (1) an SO_2 standard of 0.90 lb/MW-hr gross energy output or (2) not combust any fuel which contains total potential sulfur emissions in excess of 0.060 lb-SO_2/mmBtu heat input. Additionally, §60.4365(a) exempts the permittee from monitoring fuel sulfur content (to show compliance with §60.4330(a)(2)) if a source burns only natural gas that is covered by a purchase or transportation contract that limits sulfur to no more than 20 grains per 100 scf. CGT will show compliance with this requirement.

Subpart KKKK includes general compliance requirements (60.4333), monitoring requirements (60.4335-60.4370), reporting requirements (60.4375-60.4395), and performance testing requirements (60.4400-60.4415).

40 CFR 60 Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

CGT's proposed 880 hp Waukesha VGF L36GL emergency generator is defined under 40 CFR 60, Subpart JJJJ as stationary spark-ignition internal combustion engines (SI ICE) and is, pursuant to §60.4230(a)(4)(iv), subject to the applicable provisions of the rule. Pursuant to §60.4233(e): "Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE." Therefore, as the proposed CGT's emergency generator is greater than 100 hp, the engine must comply with the emission standards under Table 1 for "Emergency ≥ 130 hp:" NO_x - 2.0 g/HP-hr, CO - 4.0 g/HP-hr, and VOC - 1.0 g/HP-hr. The emission standards and the proposed compliance therewith of the engines are given in the following table:

Table 6: Waukesha VGF L36GL Subpart JJJJ Compliance

Pollutant	Standard (g/HP-hr)	Uncontrolled Emissions (g/bhp)	Control Percentage	Controlled Emissions (g/bhp)(1)	JJJJ Compliant?
NO_x	2.0	2.00	n/a	n/a	Yes

CO	4.0	4.00	n/a	n/a	Yes
VOC(1)	1.0	1.00	n/a	n/a	Yes

(1) Pursuant to Subpart JJJJ, VOC emissions do not include CH_2O emissions.

Use of an emergency engine further requires compliance with the operating requirements given under §60.4243(d). In accordance with §60.4243(a)(2)(iii), since this engine is not certified, an initial performance test is required within one year of startup. Subsequent performance testing is required every 8,760 hours of operation or every three years, whichever comes first.

40 CFR 63 Subpart YYYY: National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines

As a major source of HAPs (see Table 3), the proposed Solar Titan 250 combustion turbine is subject to the NESHAP for stationary combustion turbines promulgated under 40 CFR 63 Subpart YYYY. Per 40 CFR §63.6095(d), there is a stay of standards for lean premix gas-fired stationary combustion turbines until EPA takes final action to require compliance with this subpart. Therefore, the only requirement for the proposed new turbine is to comply with the initial notification requirements in §63.6145.

40 CFR 63 Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The proposed 880 hp Waukesha VGF L36GL emergency generator is subject to the NESHAP for stationary RICE. The proposed engine is an 880-hp emergency generator which will not, and is not contractually obligated to, be available for more than 15 hours per calendar year for emergency demand response programs and voltage deviation as described in §63.6640(f)(2)(ii) and (iii). Pursuant to §63.6359(b)(i), as a new emergency stationary RICE with a site rating greater than 500 bhp at a major source of HAPs (see Table 3) which does not operate for these purposes, the proposed engine does not have to meet the requirements of Subpart ZZZZ and Subpart A except for the initial notification requirements in 40 CFR 63.6645(f).

40 CFR 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

The proposed new 1.00 mmBtu/hr process heater is subject to the NESHAP for Industrial, Commercial, and Institutional (ICI) Boilers and Process Heaters promulgated under 40 CFR 63 Subpart DDDDD, which applies to existing and new ICI boilers at major sources of HAPs. The new process heater is a new affected source (gas 1 subcategory) per Subpart DDDDD and is less than 5 mmBtu/hr heat input. As such, it is not subject to Subpart DDDDD emissions limitations but is subject to tune-ups every five years (per §63.7500(e)).

TOXICITY ANALYSIS OF NON-CRITERIA REGULATED POLLUTANTS

This section provides general toxicity information for those regulated pollutants that may be increased from the proposed changes in substantive amounts and that are not classified as "criteria pollutants." Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NO_x), Ozone, Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Sulfur Dioxide (SO_2). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect the public health and welfare. Other pollutants of concern, although designated as non-criteria and without national concentration standards, are regulated through various federal and state programs designed to limit their emissions and public exposure. These programs include federal source-specific HAPs regulations promulgated under 40 CFR 61 (NESHAPS) and 40 CFR 63 (MACT). Any potential applicability to these programs to the modified emission unit were discussed above under REGULATORY APPLICABILITY.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The requested changes evaluated herein will result in an increase of formaldehyde emissions from the Solar Titan 250 combustion turbine and only trace amounts of other individual HAPs. The following table lists formaldehyde's general carcinogenic risk as based on analysis provided in the Integrated Risk Information System. EPA's Integrated Risk Information System (IRIS) is a human health assessment program that evaluates information on health effects that may result from exposure to environmental contaminants. For a complete discussion of the known health effects of formaldehyde, and the underlying studies supporting these assessments, refer to the IRIS database located at *www.epa.gov/iris*.

Table 7: Potential HAPs - Carcinogenic Risk

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	B1 - Probable Human Carcinogen

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health affects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle (e.g., smoking). As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*.

AIR QUALITY IMPACT ANALYSIS

The proposed modification does not meet the definition of a "major modification" pursuant to 45CSR14 and, therefore, an air quality impact (computer modeling) analysis was not required. Additionally, based on the nature of the proposed modification, modeling was not required under 45CSR13, Section 7.

MONITORING, COMPLIANCE DEMONSTRATIONS, RECORD-KEEPING, AND REPORTING REQUIREMENTS

Specific (and not including those given under applicable state and federal rules) monitoring, compliance demonstration, record-keeping, and reporting requirements are given under 4.2.1. of the draft permit and may be reviewed there. The primary mechanism for continuous compliance of the combustion turbine emission limits will be monitoring and recording of the hours of operation of the unit in each operational mode. The permittee shall then be required to calculate, on a monthly basis, the actual emissions of the turbine to show compliance with the emission limits given under 4.1.2(e) of the draft permit. In addition, the permittee shall be required to monitor and record the hours of operation of the new emergency generator.

PERFORMANCE TESTING OF OPERATIONS

Performance testing requirements of the new combustion turbine are given under 4.3.1. of the draft permit and may be reviewed there.

CHANGES TO PERMIT R13-1856

As Permit Number R13-1856 was issued in 1995 under an old and now obsolete boilerplate, the draft permit was prepared using the new boilerplate and is, therefore, completely different than the old permit.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director the issuance of Permit Number R13-1856A to Columbia Gas Transmission, LLC for the above discussed changes to the Ceredo Compressor Station located near Ceredo, Wayne County, WV.

MILLS – REHEATING

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SWVA

54-011-00009

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Steel of West Virginia, Inc.
R30-01100009-2015

William F. Durham
Director

Issued: December 8, 2015 • Effective: December 22, 2015
Expiration: December 8, 2020 • Renewal Application Due: June 8, 2020

Permit Number: **R30-01100009-2015**
Permittee: **Steel of West Virginia, Inc.**
Permittee Mailing Address: **2nd Avenue and 17th Street, Huntington, WV 25726**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Huntington, Cabell County, West Virginia
Facility Mailing Address: 2nd Avenue and 17th Street, Huntington, WV 25726
Telephone Number: 304-696-8200
Type of Business Entity: Corporation
Facility Description: Primary Metal Industries
SIC Codes: 3312
UTM Coordinates: 375.03 km Easting • 4253.77 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 5

3.0. Facility-Wide Requirements and Permit Shield 13

Source-specific Requirements

4.0. Manufacturing Process Requirements 20

5.0. Fuel Burning Unit Requirements 34

6.0. Painting/Coating Operations and Degreasing Requirements 35

7.0. Emergency Generators Requirements 39

8.0. Gasoline Dispensing Facilities Requirements 48

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EU001	F001	Scrap Preparation Torches*	1952	0.5 MMBtu/hr	---
EU003	S008, F003	Lime Bin #1 Load-In; H.K. Porter	1970	0.83 tons/hr	Baghouse CE008
EU004	S007, F004	Lime Bin #2 Load-In; H.K. Porter	1970	0.83 tons/hr	Baghouse CE007
EU005A	F005A	Ladle Preheaters; Eclipse (4)	1983/2013	5.5 MMBtu/hr each	Building CE005
EU006	S008, F005	Electric Arc Furnace #1; Lectramelt	1979	20 tons/hr	Baghouse CE008
EU007	S007, F005	Electric Arc Furnace #2; Lectramelt	1979	20 tons/hr	Baghouse CE007
EU008	S008, S006	Electric Arc Furnace Canopy Hood	1989	40 tons/hr	Baghouse CE008, CE006
EU011	F005	Slag Handling	1950	40 tons/hr	Building CE005
EU012	F005	Continuous Caster; Concast	1975	40.5 tons/hr	Building CE005
EU013	F005	Caster Cutoff Torches	1975	40.5 tons/hr	Building CE005
EU014	S014	Reheat Furnace #1; Brickmont	1984	96 mmBtu/hr	---
EU015	F015	Hot Rolling Mill #1	1985	40 tons/hr	Building CE015
EU016	S016	Reheat Furnace #2; Brickmont	1997	130 mmBtu/hr	---
EU017	F017	Hot Rolling Mill #2	1994	36.8 tons/hr	Building CE017
EU020	F020	Paint Application	1997	20 gal/hr	---
EU022	S022	Continuous Wax Line Heater	1997	4 mmBtu/hr	---
EU023	F023a,b	Wax Application	1997	33 gal/hr	---
EU024	S024	Shot Blaster	1986	2.4 tons/hr	Dust Collector CE024
EU025	F025	Welding	1986	10 tons/hr	---
EU026	F026	Cold Cleaner	1975	0.3 gal/hr	---
EU028	F028	Plant Roads	1952	3.2 miles	---
EU029	F029	Baghouse Dust Handling*	1989	N/A	---
EU030	F030	Alloy Handling*	1979	N/A	---
EU031	S031	East Cooling Towers*	2000	1,800 gpm	---
EU032	S032	Melt Shop Cooling Towers*	1999	5,273 gpm	---
EU033	S033	Space Heaters (Natural Gas fired)*	1982	5 MMBtu/hr	---
EU034	S034	Emergency Generator #1; diesel fired	1996	97 HP	---

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EU035	S035	Emergency Generator #2; natural gas fired	2010	255 HP	---
EU036	S036	Emergency Generator #3; natural gas fired	2013	268 HP	---
N/A	N/A	Gasoline Storage Tank	2014	300 gallons	---

*Miscellaneous Equipment with no applicable requirements

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0834	**April 1, 1986**

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a “rolling yearly total” shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. 61 and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

3.1.10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2.]

3.1.11. On or before July 1 of each year, the owner or operator of a stationary source subject to the requirements of 45CSR29 shall submit an emission statement to the Director for the prior calendar year.
[45CSR§29-4.1.]

3.2. Monitoring Requirements

3.2.1. Visual emission checks of each emission point subject to an opacity limit, with the exception of CE006, CE007, and CE008, shall be conducted once per week during periods of normal facility operation using 40 C.F.R. 60 Appendix A, Method 22. If during these checks, or at any other time, visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with the methodology set forth in 45CSR7A "Compliance Test Procedures for 7A." If no visible emissions are observed after one month, visible emission checks shall be conducted monthly. If any visible emissions are observed during the monthly emission checks, visible emission checks shall return to being performed weekly. If no visible emissions are observed after four months, visible emission checks shall be conducted each calendar quarter. If any visible emissions are observed during the quarterly emission checks, visible emission checks shall return to being performed each calendar month. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22, or 45CSR7A, whichever is appropriate. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c. *(except CE006, CE007, and CE008)*]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the

Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.
[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. **[45CSR§30-5.3.e.]**

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. **[45CSR§30-5.1.c.3.A.]**

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. **Emission Statement Requirements.**

1. The emission statement shall contain, at a minimum, the following information:

   a. Certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. The certification shall include the full name, title, signature, date of signature, and telephone number of the certifying individual.

   b. Source identification information: Full name, physical location, and mailing address of the facility.

   c. Operating data:

      1. Percentage annual throughput;

      2. Days per week for both the normal operating schedule and for a typical ozone season day (if different from the normal operating schedule);

      3. Hours per day for both the normal operating schedule and for a typical ozone season day (if different from the normal operating schedule); and

      4. Hours per year for both the normal operating schedule and for a typical ozone season day (if different from the normal operating schedule).

   d. Emissions information:

      1. Actual VOC and/or NO_x emissions at the process level, in tons per year and pounds per day for a typical ozone season day (estimated or measured);

      2. Emission method code (estimated or measured);

      3. Units code to identify the emissions units (tons per year or pounds per day); and

      4. Calendar year for the emissions.

   e. Control equipment information:

      1. Current primary and secondary control equipment identification codes; and

      2. Current control equipment efficiencies (%).

f. Process rate data:

1. Annual fuel or process throughput rate; and

2. Peak ozone season daily process rate.

2. The owner or operator submitting an emission statement pursuant to the provisions of this rule shall maintain records of test methods, procedures, calculations or other information used to determine emission estimates for a period of three (3) years following the date of submittal.

3. The Director may require the submittal of records, test methods, or other data upon which the information in Section 3.5.10.2. is based to verify emission estimates.
4. All non-confidential emission statement data will be submitted by the Director to U.S. EPA by updating AIRS/AFS on an annual basis. All confidential emission statement data will be submitted by the Director to U.S. EPA in accordance with the provisions of W. Va. Code §22-5-10 and rules promulgated thereunder.

[45CSR§29-5.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. 40 CFR Part 60, Subpart AA and AAa - The existing EAFs and associated baghouses were constructed prior to October 21, 1974. Work was performed on the EAFs in 1979, however the work did not meet the definition of "modification" or "reconstruction" as determined in the July 10, 2006 significant modification.

b. 40 CFR Part 60, Subparts K, Ka, Kb - The facility does store petroleum-based liquids in fixed roof storage tanks, however there are no tanks with capacities greater than 65,000 gallons (Subpart K), 40,000 gallons (Subpart Ka), or 75 cubic meters (Subpart Kb).

c. 40 CFR Part 63, Subpart DDDDD - The facility does not meet the definition of a major source of HAPs

d. 40 CFR Part 63, Subpart FFFFF - The facility does not meet the definition of a major source of HAPs.

e. 40 CFR Part 63, Subpart MMMM - The facility does not meet the definition of a major source of HAPs.

4.0. Manufacturing Processes Requirements [EU003, EU004, EU005A, EU006, EU007, EU011, EU0012, EU013, EU014, EU015, EU016, EU017, EU024, EU025]

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7. of 45CSR7.
[45CSR§7-3.1. *(except EU006 and EU007)*]

4.1.1.a. The provisions of 4.1.1. above, shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2.]

4.1.2. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7. *(EU003 and EU004)*]

4.1.3. No person shall cause, suffer, allow, or permit PM to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantities specified in this permit.

Emission Unit ID	Equipment Description	Max. Allowable PM Emission Limit (lb/hr)
EU005A	Ladle Preheaters	29.4
EU006	Electric Arc Furnace #1	28
EU007	Electric Arc Furnace #2	28
EU012	Continuous Caster	32.2
EU013	Caster Cutoff Torches	32.2
EU014	Reheat Furnace #1	33.4
EU016	Reheat Furnace #2	21.9
EU015	Hot Rolling Mill #1	32.2
EU017	Hot Rolling Mill #2	15.6
EU025	Welding	14.3

[45CSR§7-4.1.]

4.1.4. No person shall circumvent the provisions of 45CSR7 by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.
[45CSR§7-4.3.]

4.1.5. If a duplicate source operation that meets the requirements of 45CSR7 is expanded or if a source operation that meets the requirements of this rule is expanded to form a duplicate source operation, the total allowable emission rate for the expanded portion shall be determined by the following formula:

$$R_e = \left(\frac{W_e}{W_{et}} \right) R_{et}$$

Where,

R_e is the total allowable emission rate in pounds per hour for the new expanded portion of the duplicate source operation;

W_{et} is the total operating process weight rate in pounds per hour of the source operation or duplicate source operation prior to expansion plus the operating process weight rate of the new expanded portion;

R_{et} is allowable emission rate in pounds per hour found in Section 4.1.3. in this permit; and

W_e is the operating process weight rate in pounds per hour for the new expanded portion.
[45CSR§7-4.4. *(EU016, EU017)*]

4.1.6. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

4.1.7. Potential Hazardous Material Emissions--Persons responsible for manufacturing process source operations from which hazardous particulate matter material may be emitted such as, but not limited to, lead, arsenic, beryllium and other such materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluations of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Director working in conjunction with other appropriate governmental agencies.
[45CSR§7-4.13. *(EU006 and EU007)*]

4.1.8. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e. of 45CSR10.
[45CSR§10-4.1. *(EU006, EU007, EU014, EU016)*]

4.1.9. The particulate emission rate from each of the two (2) shot blasting machines (EU024) and related fabric dust collectors (CE024) shall not exceed 0.295 lb/hr. Compliance with this limit shall demonstrate compliance with the less stringent limit of 45CSR§7-4.1.
[45CSR13 - Permit R13-0834, Condition (A) and 45CSR§7-4.1. *(EU024)*]

4.1.10. **What are the requirements for the control of contaminants from scrap?**

a. *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF at your facility, you must comply with the requirements in either paragraph a.1. or 2. of this section. You may have certain scrap at your facility subject to paragraph a.1. of this section and other scrap subject to paragraph a.2. of this section provided the scrap remains segregated until charge make-up.

1. *Pollution prevention plan.* For the production of steel other than leaded steel, you must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, you must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. You must submit the scrap pollution prevention plan to the permitting authority for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. You must keep a copy of the plan onsite, and you must provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in paragraphs a.1.i. through iii. of this section:

   i. Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

   ii. A requirement in your scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.

   iii. Procedures for determining if the requirements and specifications in paragraph a.1. of this section are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

   iv. The requirements of paragraph a.1. of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.

2. *Restricted metallic scrap.* For the production of steel other than leaded steel, you must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, you must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if you meet the requirements in paragraph b.3.; of this section.

b. *Mercury requirements.* For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs b.1., 2., or 3. of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph b.4. of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

1. *Site-specific plan for mercury switches.* You must comply with the requirements in paragraphs b.1.i. through v. of this section.

   i. You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

   ii. You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph b.1.i. of this section for removal of mercury switches. You must submit the plan to the permitting authority for approval. You must operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:

      A. A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

      B. Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;

      C. Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

      D. Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph b.1.ii.C. of this section.

   iii. You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to your facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.

   iv. You must establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph b.1. of this section may require only the removal of convenience light switch mechanisms, the permitting authority will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap

(such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

v. For each scrap provider, you must submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph b.1.ii.A. of this section. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

2. *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs b.2.i. through iii. of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs b.2.i. through iii. of this section.

i. The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

ii. The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under paragraph b.2. of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

iii. The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

iv. You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

A. The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

B. You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must

provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

C. You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

3. *Option for specialty metal scrap.* You must certify in your notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

4. *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs b.1. through 3. of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

[45CSR34, 40 CFR §§ 63.10685(a) and (b)]

4.1.11. **What are the requirements for electric arc furnaces?**

a. You must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and conveys the collected emissions to a control device for the removal of particulate matter (PM).

b. You must not discharge or cause the discharge into the atmosphere from an EAF any gases which:

1. exit from a control device and contain in excess of 0.0052 gr/dscf of PM; and

2. exit from a melt shop and, due solely to the operations of any affected EAF(s), exhibit 6 percent opacity or greater. Compliance with this limit shall demonstrate compliance with the less stringent limitation of 45CSR§7-3.1.

[45CSR34, 40 CFR §§ 63.10686(a) and (b); and 45CSR§7-3.1. *(EU006 and EU007)*]

4.2. Monitoring Requirements

4.2.1. Visual emission checks of each baghouse emission point shall be conducted once per week for three 6-minute intervals during periods of EAF operation using 40 C.F.R. 60 Appendix A, Method 22 by personnel trained and certified semi-annually. If during these checks, or at any other time, visible emissions are observed, the compartment(s) observed to have emissions shall be isolated for inspection and repairs if necessary. Records shall be maintained on site and shall include all data required by 40 C.F.R. 60 Appendix A, Method 22. These records shall include, at a minimum, the date and time of each visible emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.

[45CSR§30-5.1.c., 45CSR34, 40 CFR §63.10686(e), and 40 CFR § 64.3(a)(1) and (2) *(CE006, CE007, and CE008)*]

4.2.2. The owner or operator of fuel burning unit, manufacturing process source or combustion source shall demonstrate compliance with Section 4.1.8. of this permit by testing and /or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

[45CSR§10-8.2.c. *(EU006, EU007, EU014, EU016)*]

4.2.3. The permittee shall comply with Section 4.1.7. of this permit by minimizing HAP emissions from the Electric Arc Furnaces by operating and maintaining equipment in accordance with good plant operating procedures. **[45CSR§30-5.1.c. *(EU006 and EU007)*]**

4.2.4. You must monitor the capture system and PM control device required by 40 CFR part 63, subpart YYYYY, and maintain records according to the compliance assurance monitoring requirements in 40 CFR part 64. **[45CSR34, 40 CFR § 63.10686(e) *(EU006 and EU007)*]**

4.2.5. The permittee shall measure, read and record the total fan amperage for the two baghouse fans on the Wheelabrator baghouse (CE007), the single baghouse fan for the East baghouse (CE006), and the single baghouse fan for the West baghouse (CE008) once per shift when the EAF is operational. Fan amperage should be maintained between 185 and 205 amps ±15% for CE006 and CE008; and 60 to 65 amps ± 15% for CE007 (Indicator Range). An excursion is defined as fan motor amp readings outside of the Indicator Range over a 24-hour averaging period. All readings taken shall be averaged over a 24-hour period for each fan motor. Upon demonstrating compliance with the applicable emissions limits in subsequent performance tests at an average fan amperage that is either above the upper fan range or below the lower fan amperage range, then the new upper or lower fan amperage, as applicable, will replace the corresponding fan amperage noted in this term. SWVA shall maintain a record, and notify WV DEP, identifying the new fan amperage range. **[45CSR34, 45CSR§30-5.1.c., 40 CFR §63.10686(e), 40 CFR § 64.3(a)(1) and (2) *(CE006, CE007, and CE008)*]**

4.2.6. *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. **[45CSR§30-5.1.c., 40 CFR § 64.7(b) *(CE006, CE007, and CE008)*]**

4.2.7. *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **[45CSR§30-5.1.c., 40 CFR § 64.7(c) *(CE006, CE007, and CE008)*]**

4.2.8. *Response to excursions or exceedances.*

1. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

2. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[45CSR§30-5.1.c., 40 CFR § 64.7(d) *(CE006, CE007, and CE008)*]

4.2.9. *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[45CSR§30-5.1.c., 40 CFR § 64.7(e) *(CE006, CE007, and CE008)*]

4.3. Testing Requirements

4.3.1. Compliance with the mass emission standards set forth in Section 4.1.3. of this permit shall be determined in accordance with the following:

a. Except as otherwise provided in this section, stack testing to determine particulate mass emissions shall be performed using the methodology set forth in 40 CFR, Part 60, Appendix A, Methods 1 through 5, as published July 1, 1997, unless the Director determines that some aspect of the methods are not appropriate or adaptable to a particular manufacturing process source operation due to process parameters, access to test location, or other factors.

In the event that Methods 1-5 cannot be employed for a particular process operation, the Director may specify or approve alternative methods or variances to these reference methods that have been demonstrated to be equivalent. Such alternative methods may include the methodology set forth in 40 CFR, Part 60, Appendix A, Method 17, as published July 1, 1997.

1. Compliance shall be determined by taking the average of the mass emission rates determined from three (3) consecutive test runs conducted during a seven (7) day period.

2. Unless otherwise approved or specified by the Director, a minimum volume of thirty (30) standard cubic feet (SCF) of gas must be sampled per test run.

b. Unless otherwise approved or specified by the Director, all mass emission compliance tests shall be conducted during periods of maximum production rates and under conditions which are otherwise representative of normal operation. Maximum production rates shall be the maximum design capacity of the emitting source or unit, unless the Director has determined that the equipment can be and is routinely operated at production rates above the design rate or it is demonstrated to the satisfaction of the Director that the equipment cannot be operated at design capacity.

c. At least thirty (30) days prior to each compliance test, a test protocol must be furnished to the Director for his review and approval and providing as a minimum, the following information:

1. Identification and description of the process operation that is to be tested;

2. A discussion of the manner in which the process operation will be operated during the test periods with respect to production or process weight rates, representativeness of feed or raw materials to be used, operating temperatures, and other factors which may affect emissions;

3. A description or listing of process and control equipment data that will be monitored and recorded during the tests runs;

4. A description of test methods and equipment that will be employed with requests for approval of any variances to the reference test methods. If sampling is to be non-continuous as a result of the cyclical nature of the process or other factors, this must be fully described;

5. A drawing of the stack or duct sections where samples will be taken showing distances to upstream and downstream gas flow disturbances or bends and changes in duct or stack cross sections;

6. A drawing of the test plane(s) showing dimensions and number and location of sampling (traverse) points;

7. The sampling time at each traverse point and total sampling time for each test run. If the sampling time per traverse point is to be less than two minutes, comments must be written concerning the variability of gas flow and temperatures during the short sampling time and how the sampling rate will be monitored and adjusted to maintain isokinetic conditions;

8. The minimum volume (SCF) of gas that will be sampled per test run; and

9. Name of the person to contact concerning the scheduled tests and affiliation of personnel who will actually conduct the tests.

d. Notification of the dates upon which compliance testing will be conducted must be provided to the Director, in writing, no later than fifteen (15) days prior to the date of the first test run so that he may, at his option, have an observer present during the test runs and sample analyses. Sampling data, operating parameters and other information relevant to the emissions tests, are to be made available to the Director's test observers, on request, during the test periods. Any such data or other information so made available to the Director shall also be made available to the public in accordance with W.Va. Code §§22-5-1 et seq., 29B-1-1 et seq., and 45CSR31.

e. A compliance test report providing the following information and any additional information that the Director may require shall be submitted to the Director within sixty (60) days of the completion of the compliance testing.

1. General Information.

A. Plant name and location;

B. Units/stack tested;

C. Name and address of company performing the tests; and

D. Test dates and times.

2. Report Certification. The following persons shall certify that the test report contains true and accurate information:

A. Test team supervisor;

B. Reviewer of test report (if applicable); and

C. If test is performed by source owner, the report shall also be certified by plant manager or corporate official.

3. Test Summary.

A. Description of emissions sources/stacks tested;

B. Purpose of test;

C. Pollutants measured;

D. Process data;

1. Process and air pollution control equipment flow diagram;

2. Summary of process parameters including production rates, process weight rates and other relevant parameters measured and recorded and/or calculated for the test periods. Any calculations shall be attached to the report; and

3. Description of any unusual or non-typical operating mode, raw materials, fuels, etc. occurring or used during the tests.

4. Test Results.

A. Mass emission results with emissions reported in units of the applicable standard and in pounds per hour;

B. Visible emissions results, if applicable, as measured by observer or transmissometer. If observed by personnel from test company or plant, evidence of observer's certification shall be attached to the report;

C. Description of collected samples (if such information is deemed to be useful); and

D. Description and discussion of real or apparent errors involved in test or process measurements, analysis, etc.

5. Test Procedures.

A. Description of test equipment including drawing of sampling train;

B. Description of test procedures employed with detailed documentation of deviations from reference methods;

C. Description of analytical procedures employed with detailed documentation of deviations from reference methods;

D. Dimensioned drawing of sampling port location showing distances to upstream and downstream gas flow disturbances; and

E. Cross-sectional drawing of sampling plane showing location and numbers or other designations of sampling points.

6. Appendix.

A. Copies of original field data sheets from test runs;

B. Copies or original log sheets, strip charts and other process or control equipment data recorded during tests. These attachments shall be certified by a responsible plant official;

C. Laboratory report including chain of custody;

D. Description of test equipment calibration procedures and calibration results for test equipment used;

E. Description of calibration performed on devices recording important process data during the tests;

F. Copies of strip charts or other original outputs from continuous emission monitoring (CEM) equipment on the tested source and description of CEM system calibration and operation prior to and/or during tests;

G. Copies of relevant correspondence such as letters approving test method variances; and

H. Names and titles of persons involved in the test including sampling team members, company personnel, and outside observers.

[45CSR§§7A-3.1.a., b., c., d., and e.]

f. Except as provided in 45CSR§7A-3.1.h.4., stack sampling procedures for determining compliance with applicable emission standards for facilities equipped with modular baghouses shall be as follows:

1. The methods described in section a. shall be used except as provided in f.2. and f.3.

2. Compliance shall be determined from the results of at least one (1) test run performed on each stack or exhaust vent. For the purpose of determining compliance with a mass emission rate standard expressed in pounds per hour, the results of the tests performed on each stack or exhaust vent shall be summed. Compliance with a mass concentration standard shall be determined by using a gas flow-weighted average of the concentrations measured from all stacks or vents.

3. The compliance demonstration shall be based upon a minimum of three (3) test runs. If more than one test run is performed on one stack or exhaust vent the results of the test runs on that stack shall be averaged prior to summing or determining weighted averages in accordance with f.2.

[45CSR§7A-3.1.h.]

4.3.2. At such reasonable times as the Director may designate, the owner or operator of any manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of sections 3, 4 or 5 of 45CSR10. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

[45CSR§10-8.1.a. *(EU006, EU007, EU014, EU015)*]

4.3.3. You must conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in Section 4.1.11. of this permit.

1. You must conduct each PM performance test for an EAF according to the procedures in 40CFR§ 63.7 and 40CFR§60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4:

   i. Method 1 or 1A of appendix A-1 of 40 CFR part 60 to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

   ii. Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-1 of 40 CFR part 60 to determine the volumetric flow rate of the stack gas.

   iii. Method 3, 3A, or 3B of appendix A-3 of 40 CFR part 60 to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference - see 40CFR§63.14) as an alternative to EPA Method 3B.

   iv. Method 4 of appendix A-3 of 40 CFR part 60 to determine the moisture content of the stack gas.

   v. Method 5 or 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test. For EAF, sample only when metal is being melted and refined.

2. You must conduct each opacity test for a melt shop according to the procedures in 40 CFR §63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF are combined with emissions from emission sources not subject to this subpart, you must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to this subpart.

3. During any performance test, you must monitor and record the information specified in 40 CFR §60.274a(h) for all heats covered by the test.

4. You must notify and receive approval from the Administrator for procedures that will be used to determine compliance for an EAF when emissions are combined with those from facilities not subject to this subpart.

[40 CFR § 63.10686(b) and 45CSR34 *(EU006 and EU007)*]

4.4. Recordkeeping Requirements

4.4.1. The owner or operator of manufacturing process source(s) or combustion source(s) subject to sections 3, 4 or 5 of 45CSR10 shall maintain on-site a record of all required monitoring data as established in a monitoring plan. The approved monitoring plan submitted to DAQ on May 7, 2001 requires the permittee to maintain records of the amount of natural gas combusted in the reheat furnaces. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.
[45CSR§10-8.3.a. *(EU006, EU007, EU014, EU016)*]

4.4.2. The permittee shall comply with Section 4.1.9 by visible emissions checks in accordance with Section 3.2.1. and by maintaining monthly records of the tons of steel produced and the operating hours of the shot blasters.
[45CSR§30-5.1.c. *(EU024)*]

4.4.3. The owner or operator shall maintain daily records of the time and duration of each charge; and the time and duration of each tap.
[45CSR§30-5.1.c. *(EU006, EU007)*]

4.4.4. *Recordkeeping and reporting requirements.* In addition to the records required by 40 CFR § 63.10, you must keep records to demonstrate compliance with the requirements for your pollution prevention plan in Section 4.1.10.a.1. and/or for the use of only restricted scrap in Section 4.1.10.a.2. and for mercury in Sections 4.1.10. b.1. through 3. as applicable. You must keep records documenting compliance with Section 4.1.10.b.4. for scrap that does not contain motor vehicle scrap.

1. If you are subject to the requirements for a site-specific plan for mercury under Section 4.1.10.b.1., you must:

   i. Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

   ii. Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted inspections or taken other means of corroboration as required under Section 4.1.10.b.1.ii.C. of this permit. You may include this information in the semiannual compliance reports required under Section 4.5.2. of this permit.

2. If you are subject to the option for approved mercury programs under Section 4.1.10.b.2. of this permit, you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

[45CSR34, 40 CFR §§ 63.10685(c)(1) and (2)]

4.4.5. *General recordkeeping requirements.*

1. The owner or operator shall comply with the recordkeeping requirements specified in 40 CFR §70.6(a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions

taken, any written quality improvement plan required pursuant to 40 CFR §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

2. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
[45CSR§30-5.1.c., 40 CFR § 64.9(b) *(CE006, CE007, and CE008)*]

4.5. Reporting Requirements

4.5.1. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§10-8.3.b. *(EU006, EU007, EU014, EU016)*]

4.5.2. You must submit semiannual compliance reports to the Administrator for the control of contaminants from scrap according to the requirements in 40 CFR § 63.10(e). The report must clearly identify any deviation from the requirements in Sections 4.1.10.a. and b. and the corrective action taken. You must identify which compliance option in Section 4.1.10.b. applies to each scrap provider, contract, or shipment.
[45CSR34, 40 CFR § 63.10685(c)(3)]

4.5.3. *General reporting requirements.*

1. On and after the date specified in 40 CFR§64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 CFR §70.6(a)(3)(iii).

2. A report for monitoring under this part shall include, at a minimum, the information required under 40 CFR §70.6(a)(3)(iii) and the following information, as applicable:

   i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

   ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

   iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 CFR § 64.9(a) *(CE006, CE007, and CE008)*]

4.6. Compliance Plan

4.6.1. None.

5.0. Fuel Burning Unit Requirements [EU022]

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. **[45CSR§2-3.1]**

5.2. Monitoring Requirements

5.2.1. The Continuous Wax Line Heater shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices and shall only burn natural gas.
[45CSR§30-5.1.c.]

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. None.

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0. Painting/Coating Operations and Degreasing Requirements [EU020, EU023, EU026]

6.1. Limitations and Standards

6.1.1. Upon startup of a new coating line or operation, or upon changing the method of compliance for an existing subject coating line or operation from daily-weighted averaging or control devices to the use of complying coatings, the owner or operator of a coating line or operation shall certify to the Director that the coating line or operation is or will be in compliance with the requirements of the applicable section of this regulation on and after the initial startup date. Such certification shall include:

1. The name and location of the facility;

2. The address and telephone number of the person responsible for the facility;

3. Identification of subject sources;

4. The name and identification number of each coating, as applied, on each coating line or operation;

5. The mass of VOC per volume (minus water and exempt compounds) and the volume of each coating (minus water and exempt compounds), as applied; and

6. The time at which the facility's "day" begins if a time other than midnight local time is used to define a "day".

[45CSR§21-4.3.a. *(EU020, EU023)*]

6.1.2. Upon startup of a new coating line or operation, or upon changing the method of compliance for an existing subject coating line or operation from the use of complying coatings or control devices to daily-weighted averaging, the owner or operator of the subject coating line or operation shall certify to the Director that the coating line or operation is or will be in compliance on and after the initial startup date. Such certification shall include:

1. The name and location of the facility;

2. The address and telephone number of the person responsible for the facility;

3. Identification of subject sources;

4. The name and identification number of each coating line or operation which will comply by means of daily-weighted averaging;

5. The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation;

6. The method by which the owner or operator will create and maintain records each day as required in Section 6.4.2.;

7. An example of the format in which the records required in Section 6.4.2. will be kept;

8. Calculation of the daily-weighted average, using the procedure in Section 6.4.5., for a day representative of current or projected maximum production levels; and

9. The time at which the facility's "day" begins if a time other than midnight local time is used to define a "day".

[45CSR§21-4.4.a. *(EU020, EU023)*]

6.1.3. No owner or operator of a miscellaneous metal parts and products coating line shall cause or allow the application of any coating with VOC content in excess of 3.5 lbs per volume of coating in gallons, minus water and exempt compounds, as applied.
[45CSR§21-19.3.a.4. *(EU020, EU023)*]

6.1.4. The owner or operator of a cold cleaning facility (metal solvent cleaning) shall:

a. Provide a permanent, legible, conspicuous label, summarizing the operating requirements;

b. Store waste solvent in covered containers;

c. Close the cover whenever parts are not being handled in the cleaner;

d. Drain the cleaned parts until dripping ceases;

e. Degrease only materials that are neither porous nor absorbent.

[45CSR§21-30.3.a. *(EU026)* State-enforceable only]

6.1.5. The emission rate of HAPs from the Paint Application, EU020, shall not exceed 5.7 tons per year. The paint used in the Paint Application shall not exceed 62,500 gallons per year. The annual limit represents a twelve (12) month rolling total limit.
[45CSR§30-12.7.]

6.1.6. No owner or operator of a miscellaneous metal parts and products coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation within section 6.1.3., during the same day (e.g., all coatings used on the line are subject to 0.42 kg/L [3.5 lb/gal]), shall apply coatings on that line during any day whose daily-weighted average VOC content calculated in accordance with the procedure specified in 45CSR§21-43 exceeds the coating VOC content limit corresponding to the category of coating used.
[45CSR§21-19.4. *(EU020, EU023)*]

6.2. Monitoring Requirements

6.2.1. None.

6.3. Testing Requirements

6.3.1. None.

6.4. Recordkeeping Requirements

6.4.1. The owner or operator of a coating line or operation and complying by the use of complying coatings shall collect and record the following information each day for each coating line or operation and maintain the information at the facility for a period of 3 years:

a. the name and identification number of each coating, as applied, on each coating line or operation; and

b. the mass of VOC per volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation.

[45CSR§21-4.3.b. *(EU020, EU023)*]

6.4.2. The owner or operator of a coating line or operation and complying by means of daily-weighted averaging shall collect and record all of the following information each day for each coating line or operation and maintain the information at the facility for a period of 3 years:

1. The name and identification number of each coating, as applied, on each coating line or operation;

2. The mass of VOC per volume (minus water and exempt compounds) and the volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation; and

3. The daily-weighted average VOC content of all coatings, as applied, on each coating line or operation calculated according to the procedure in Section 6.4.5.

[45CSR§21-4.4.b. *(EU020, EU023)*]

6.4.3. An owner or operator of a miscellaneous metal parts and products coating line and complying by the use of complying coatings shall comply with the certification, recordkeeping, and reporting requirements in Sections 6.1.1., 6.4.1., and 6.5.1.

[45CSR§21-19.7.b. *(EU020, EU023)*]

6.4.4. An owner or operator of a miscellaneous metal parts and products coating line and complying by daily-weighted averaging shall comply with the certification, recordkeeping, and reporting requirements in Sections 6.1.2., 6.4.2., and 6.5.2.

[45CSR§21-19.7.c. *(EU020, EU023)*]

6.4.5. Daily-weighted average. -- The daily-weighted average VOC content, in units of mass of VOC per unit volume of coating, minus water and exempt compounds, as applied, of the coatings used on a day on a coating line or operation shall be calculated using the following equation:

$$VOC_w = \frac{\sum_{i=1}^{n} V_i C_i}{V_T}$$

where:

VOC_w = The daily-weighted average VOC content of the coatings, as applied, used on a coating line or operation in units of kilograms of VOC per liter of coating (kg VOC/L) (pounds of VOC per gallon of coating [lb VOC/gal]), minus water and exempt compounds;

n = The number of different coatings, as applied, each day on a coating line or operation;

V_i = The volume of each coating, as applied, each day on a coating line or operation in units of L (gal), minus water and exempt compounds; and

C_i = The VOC content of each coating, as applied, each day on a coating line or operation in units of kg VOC/L of coating (lb VOC/gal), minus water and exempt compounds; and

V_T = The total volume of all coating, as applied, each day on a coating line or operation in units of L (gal), minus water and exempt compounds.

[45CSR§21-43.1. *(EU020, EU023)*]

6.4.6. To determine compliance with the emission limits set forth in Section 6.1.5. of this permit, the permittee shall keep records on a monthly, and 12-month rolling total basis, of the amount of coatings, type of coatings, and HAP constituents and amount in coatings, used in the Paint Application. The permittee shall calculate the HAP emissions on a monthly, and 12-month rolling total basis.

[45CSR§30-5.1.c. *(EU020)*]

6.5. Reporting Requirements

6.5.1. The owner or operator of a subject coating line or operation and complying by the use of complying coatings shall notify the Director in the following instances:

1. Any record showing use of any non-complying coatings shall be reported by sending a copy of such record to the Director within 30 days following that use; and

2. At least 30 calendar days before changing the method of compliance from the use of complying coatings to daily-weighted averaging, the owner or operator shall comply with all requirements of section 6.1.2. Upon changing the method of compliance from the use of complying coatings to daily-weighted averaging, the owner or operator shall comply with all requirements of the section of this regulation applicable to the coating line or operation.

[45CSR§21-4.3.c. *(EU020, EU023)*]

6.5.2. The owner or operator of a subject coating line or operation and complying by daily-weighted averaging shall notify the Director in the following instances:

1. Any record showing noncompliance with the applicable daily-weighted average requirements shall be reported by sending a copy of the record to the Director within 30 days following the occurrence, except as provided in 45CSR§21-9.3.

2. At least 30 calendar days before changing the method of compliance from daily-weighted averaging to the use of complying coatings, the owner or operator shall comply with all requirements of section 6.1.1. Upon changing the method of compliance from daily-weighted averaging to the use of complying coatings, the owner or operator shall comply with all requirements of the section of this regulation applicable to the coating line or operation.

[45CSR§21-4.4.c. *(EU020, EU023)*]

6.6. Compliance Plan

6.6.1. None.

7.0. Emergency Generators Requirements [(EU034, EU035, EU036)]

7.1. Limitations and Standards

EU034:

7.1.1. **What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?** If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d of 40 CFR 63 subpart ZZZZ that apply to you.

You must meet the following requirements, except during periods of startup. During periods of startup you must comply with Condition 7.2.1.c.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first; (Sources have the option to utilize an oil analysis program as described in Condition 7.2.1.d. in order to extend the specified oil change requirement.)

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Note: If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[45CSR34, 40 CFR §63.6603(a) and Table 2d(4) and footnote 2 to Table 2d]

7.1.2. **What are my general requirements for complying with this subpart?**

a. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34, 40 CFR §63.6605]

EU035 and EU036:

7.1.3. **What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards below for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in the Table below, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Engine type and fuel	Maximum engine power	Emission standards[a]					
		g/HP-hr			ppmvd at 15% O_2		
		NO_X	CO	VOC[b]	NO_X	CO	VOC[b]
Emergency	HP ≥ 130	2	4	1	160	540	86

[a] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b] For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[40CFR§60.4233(e) and Table 1, 45CSR16]

7.1.4. **How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?** Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in Section 7.1.3. over the entire life of the engine.
[40CFR§60.4234, 45CSR16]

7.1.5. **What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?** Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non emergency engines, the owner or operator must install a non resettable hour meter.
[40CFR§60.4237(b), 45CSR16]

7.2. Monitoring Requirements

EU034:

7.2.1. **What are my monitoring, installation, collection, operation, and maintenance requirements?**

a. If you own or operate an existing emergency or black start stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

b. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

c. If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to 40 CFR 63 subpart ZZZZ apply.

d. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in Condition 7.1.1., you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 7.1.1. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34, 40 CFR §§63.6625(e), (f), (h), and (i)]

7.2.2. **How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

a. You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in 40 CFR 63 subpart ZZZZ, Table 2d that apply to you according to methods specified in 40 CFR 63 subpart ZZZZ, Table 6 (same as Condition 7.2.1.a..)

b. You must report each instance in which you did not meet each emission limitation or operating limitation in 40 CFR 63 part ZZZZ, Table 2d that apply to you. These instances are deviations from the emission and operating limitations in this subpart.

c. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs 1. through 3. of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1. through 3. of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs 1. through 3. of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary RICE in emergency situations.

2. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs 2.i. through iii. of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 3. of this section counts as part of the 100 hours per calendar year allowed by this paragraph 2.

i. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer,

the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2. of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34, 40 CFR §§ 63.6640(a), (b), (f)(1), (2), and (4), and Table 6(9)]

EU035 and EU036:

7.2.3. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in Condition 7.1.3., you must demonstrate compliance according to one of the methods specified in paragraph 1. and 2.

1. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR § 60.4243(a).

2. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Condition 7.1.3. and according to the requirements specified in 40 CFR § 60.4244, as applicable, and according to paragraph (i) below.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

3. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Section 7.1.3. and according to the requirements specified in 40 CFR §60.4244, as applicable, and according to the following:

[40CFR§§60.4243(b), (b)(1), (b)(2), and (b)(2)(i), 45CSR16]

7.2.4. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs 1. through 3. below. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing,

emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1. through 3. below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 1. through 3. of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of emergency stationary ICE in emergency situations.

2. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs i. through iii. below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 3. of this section counts as part of the 100 hours per calendar year allowed by this paragraph 2.

   i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

   ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

   iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2. above. Except as provided in paragraph 3.i. below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

   i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

      A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

      B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

      C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

      D. The power is provided only to the facility itself or to support the local transmission and distribution system.

E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40CFR§60.4243(d), 45CSR16]

7.2.5. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of Section 7.1.3.
[40CFR§60.4243(e), 45CSR16]

7.2.6. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. **[40CFR§60.4243(g), 45CSR16]**

7.3. Testing Requirements

EU035 and EU036:

7.3.1. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs a. through f. of this section.

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to 40 C.F.R. part 60, subpart JJJJ.

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

c. You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where: ER = Emission rate of NO_X in g/HP-hr.
C_d = Measured NO_X concentration in parts per million by volume (ppmv).
1.912×10^{-3} = Conversion constant for ppm NO_X to grams/standard cubic meter at 20° Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:
ER = Emission rate of CO in g/HP-hr.
C_d= Measured CO concentration in ppmv.
1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20° Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

f. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:
ER = Emission rate of VOC in g/HP-hr.
C_d= VOC concentration measured as propane in ppmv.
1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20° Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
T = Time of test run, in hours.
HP-hr = Brake work of the engine, in HP-hr.

g. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = C_{Mi} / C_{Ai} \qquad \text{(Eq. 4)}$$

Where:
RF_i= Response factor of compound i when measured with EPA Method 25A.
C_{Mi}= Measured concentration of compound i in ppmv as carbon.
C_{Ai}= True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_1 \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:
C_{icorr}= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.
C_{imeas}= Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{peq} = 0.6098 \times C_{icorr} \quad \text{(Eq. 6)}$$

Where:
C_{Peq}= Concentration of compound i in mg of propane equivalent per DSCM.
[40CFR§§60.4244(a)-(g), 45CSR16]

7.4. Recordkeeping Requirements

EU034:

7.4.1. **What records must I keep?**

a. If you must comply with the emission and operating limitations, you must keep the records described in paragraphs a.1. through a.4., b.1. and b.2., and c. below.

1. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Notification of Compliance Status that you submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).

2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

3. Records of all required maintenance performed on the air pollution control and monitoring equipment.

4. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 7.1.2.b., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

b. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

1. An existing stationary emergency RICE.

2. An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

c. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines , you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or 40 CFR §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

[45CSR34, 40 CFR §§ 63.6655(a), (e), and (f)(2)]

7.4.2. **In what form and how long must I keep my records?** Your records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1). As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record readily accessible in hard copy or electronic form for at

least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).
[45CSR34, 40 CFR § 63.6660]

EU035 and EU036:

7.4.3. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

a. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs a.1. through 4. of this section.

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.

2. Maintenance conducted on the engine.

3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR §60.4243(a)(2), documentation that the engine meets the emission standards.

b. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

c. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR §60.4244 within 60 days after the test has been completed.
[40CFR§§60.4245(a), (b), and (d), 45CSR16]

7.5. Reporting Requirements

7.5.1. None.

7.6. Compliance Plan

7.6.1. None.

8.0. Gasoline Dispensing Facilities Requirements [(Gasoline Storage Tank)]

8.1. Limitations and Standards

8.1.1. If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in Section 8.2.2.
[45CSR34, 40 CFR § 63.11111(b)]

8.1.2. If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.
[45CSR34, 40 CFR § 63.11111(i)]

8.1.3. The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to 40 CFR §63.11116.
[45CSR34, 40 CFR § 63.11111(j)]

8.2. Monitoring Requirements

8.2.1. **What are my general duties to minimize emissions?** You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34, 40 CFR § 63.11115(a)]

8.2.2. **Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.**

a. You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
   1. Minimize gasoline spills;
   2. Clean up spills as expeditiously as practicable;
   3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
   4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

b. You are not required to submit notifications or reports as specified in 40 CFR §63.11125, 40 CFR §63.11126, or 40 CFR 63 subpart A, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

c. You must comply with the requirements of this subpart upon startup of the affected source.

d. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph a.3. of this section.

[45CSR34, 40 CFR §§63.11113(a)(2) and 63.11116]

8.3. Testing Requirements

8.3.1. None.

8.4. Recordkeeping Requirements

8.4.1. An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified below, recordkeeping to document monthly throughput must begin upon startup of the affected source. Records required under this paragraph shall be kept for a period of 5 years.

An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in 40 CFR §63.11111 at the time you commenced operation.
[45CSR34, 40 CFR §§ 63.11111(e) and 63.11112(b)]

8.1.3. Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.
[45CSR34, 40 CFR § 63.11111(h)]

8.5. Reporting Requirements

8.5.1. None.

THERMAL DRYER – FLUIDIZED BED

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Marion County Mine

54-049-00019

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Consolidation Coal Company
Loveridge Preparation Plant
R30-04900019-2014

John A. Benedict
Director

Issued: January 24, 2014 • Effective: February 7, 2014
Expiration: January 24, 2019 • Renewal Application Due: July 24, 2018

Permit Number: **R30-04900019-2014**
Permittee: **Consolidation Coal Company**
Facility Name: **Loveridge Preparation Plant**
Permittee Mailing Address: **P. O. Box 100, Osage, WV 26543**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Fairview, Marion County, West Virginia
Telephone Number:	304-534-4748
Type of Business Entity:	Corporation
Facility Description:	Coal preparation plant with a thermal dryer
SIC Codes:	1222
UTM Coordinates:	561.6 km Easting • 4,383.9 km Northing • Zone 17

Permit Writer: Beena Modi

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 4

2.0. General Conditions 9

3.0. Facility-Wide Requirements and Permit Shield 18

Source-specific Requirements

4.0. Source-Specific Requirements 24

APPENDIX A – Monthly Opacity Testing Records and Certification of Data Accuracy

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
		Raw Coal Circuit			
001	Z01	**Conveyor 1** – Mine slope belt to Raw Coal Transfer Building	Pre 1974	3,000 lb/hr 26,280,000 TPY	FE
005	Z01	**Conveyor 3** – Belt from Raw Coal Transfer Building to Raw Coal Storage Bin 1	Pre 1974	3,000 lb/hr 26,280,000 TPY	FE
006	Z01	**Storage Bin 1** – Raw Coal storage silo from Conveyor 3 and transfers to Conveyor 4; Storage capacity is 15,000 tons	Pre 1974	2,000 lb/hr 17,520,000 TPY	FE
008	Z01	**Conveyor 4** – Belt from Raw Coal Storage Bin 1 to Prep Plant	Pre 1974	2,000 lb/hr 12,000,000 TPY	FE
002	Z01	**Conveyor 2** – Belt from Raw Coal Storage Bin 1 to Prep Plant	1989	3,000 lb/hr 900,000 TPY	FE
003A	Z01	**Raw Coal Stockpile 1** – Stockpile equipped with Stacking Tube 1 and Stacking Tube 2; Stockpile footprint is 9.55 acres with a storage capacity of 450,000 tons	2005	3,000 lb/hr 26,280,000	ST
052	Z01	**Conveyor 21** – Belt from Raw Coal Transfer Building to Raw Coal Stockpile 1 Stacking Tube 2	2005	3,000 lb/hr 12,000,000 TPY	FE
053	Z01	**Conveyor 22** – Belt from Raw Coal Stockpile 1 to Conveyor 4	2005	3,000 lb/hr 12,000,000 TPY	FE
007	Z01	**Raw Coal Stockpile 2** – Stockpile footprint is 3.8 acres with a storage capacity of 70,000 tons	1993	1,800 lb/hr 210,000 TPY	MC
		Stoker Coal Circuit			
037	Z01	**Conveyor 19** – Belt from Prep Plant to Stoker Coal Truck Loadout	Pre 1974	300 lb/hr 1,800,000 TPY	FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
051A	Z01	**Conveyor 20** – Belt from Prep Plant to Stoker Coal Railcar Loadout	Pre 1974	300 lb/hr 1,800,000 TPY	FE
046	P003	**Lime Storage Silo 1**	Pre 1974	NA	None
048	P004	**Rock Dust Silo 1**	Pre 1974	NA	None
		Clean Coal Thermal Dryer Circuit			
034	Z01	**Conveyor 15** – Belt from Prep Plant to Thermal Dryer 1	1985	600 lb/hr 3,600,000 TPY	FE
045A/045C	P002	**Thermal Dryer** – ENI Eng. Co. Fluidized Bed Dryer rated at 182 MM BTU/hr Heat Input	1985	Max. 600 lb/hr Normal 450 lb/hr 3,600,000 TPY	Horizontal Venturi Scrubber (SCR1)/ Cyclones (CYC1)
035	Z01	**Conveyor 16** – Belt from Thermal Dryer to Conveyor 17	1985	600 lb/hr 3,600,000 TPY	FE
036	Z01	**Conveyor 17** – Belt from Conveyor 16 to Conveyor 18	1985	600 lb/hr 3,600,000 TPY	FE
036B	Z01	**Conveyor 18** – Belt from Conveyor 17 to Conveyor 6	1985	600 lb/hr 3,600,000 TPY	FE
		Clean Coal Circuit			
013	Z01	**Conveyor 5** – Belt from Prep Plant to Conveyor 6	Pre 1974	1,800 lb/hr 10,800,000 TPY	FE
015	Z01	**Conveyor 6** – Belt from Conveyor 5 and Conveyor 18 to Clean Coal Silo 1 or Conveyor 7	Pre 1974	1,800 lb/hr 10,800,000 TPY	FE
		Clean Coal Storage			
017	Z01	**Clean Coal Silo 1** – Clean Coal storage silo from Conveyor 6 and transfers to Conveyor 8; Storage capacity is 10,500 tons	Pre 1974	3,000 lb/hr 18,000,000 TPY	FE
030	Z01	**Conveyor 7** – Belt from Conveyor 6 to Clean Coal Silo 2 or Conveyor 7A	1981	1,800 lb/hr 10,800,000 TPY	FE
044	Z01	**Clean Coal Silo 2** – Clean Coal storage silo from Conveyor 6 and transfers to Conveyor 8; Storage capacity is 10,500 tons	1981	3,000 lb/hr 18,000,000 TPY	FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
031	Z01	**Conveyor 13** – Belt from Clean Coal Silo to Conveyor 8	1981	3,000 lb/hr 18,000,000 TPY	FE
030A	Z01	**Conveyor 7A** – Belt from Conveyor 7 to Clean Coal Silo 3	2006	1,800 lb/hr 10,800,000 TPY	FE
044A	Z01	**Clean Coal Silo 3** – Clean Coal storage silo from Conveyor 6 and transfers to Conveyor 8; Storage capacity is 10,500 tons	2006	1,800 lb/hr in 3,000 lb/hr out 10,800,000 TPY	FE
031A	Z01	**Conveyor 13A** – Belt from Clean Coal Silo 3 to Conveyor 8	2006	3,000 lb/hr 18,000,000 TPY	FE
Clean Coal Shipping by Truck and Railcar					
018	Z01	**Conveyor 8** – Belt from Clean Coal Silo 1, Conveyor 13 and Conveyor 13A to Single Railcar and Truck Loadout or Conveyor 9	Pre 1974/ 2006	3,000 lb/hr 18,000,000 TPY	FE
038A	Z01	**Single Railcar and Truck Loadout**	1981	3,000 lb/hr 18,000,000 TPY	PE
032	Z01	**Conveyor 9** – Belt from Conveyor 8 to Unit Train Loadout 1	Pre 1974/ 2006	3,000 lb/hr 18,000,000 TPY	FE
Refuse Circuit					
020	Z01	**Transfer Point 020** – Clean Coal Unit Train Loadout	Pre 1974	3,000 lb/hr 18,000,000 TPY	PE
021	Z01	**Conveyor 10** – Course refuse belt from Prep Plant to Conveyor 11	Pre 1974	400 lb/hr 2,400,000 TPY	FE
023	Z01	**Conveyor 11** – Course refuse belt from Conveyor 10 to Refuse Bin 2	Pre 1974	400 lb/hr 2,400,000 TPY	FE
027A	Z01	**Refuse Bin 2** – Course refuse bin from Conveyor 11 to Pan Truck Loading	Pre 1974	400 lb/hr 2,400,000 TPY	FE
025	Z01	**Conveyor 12** – Course refuse belt from Conveyor 11 to Conveyor 14	Pre 1974	400 lb/hr 2,400,000 TPY	FE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
033	Z01	**Conveyor 14** – Course refuse belt from Conveyor 12 to Refuse Bin 1	1983	400 lb/hr 2,400,000 TPY	FE
027	Z01	**Refuse Bin 1** – Course refuse belt from Conveyor 14 to Pan Truck Loading	1983	400 lb/hr 2,400,000 TPY	FE
012	Z01	**Refuse Disposal Area (RDA)**	Pre 1974	400 lb/hr 2,400,000 TPY	MC
		Haulroads			
049A	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049B	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049C	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049D	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049E	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049F	Z01	Unpaved Haulroad	Pre 1974	NA	WT
049G	Z01	Unpaved Haulroad	1993	NA	WT
049H	Z01	Unpaved Haulroad	1993	NA	WT
		VOC Emission Sources			
009B	Z01	Froth Floatation Cell	1985	NA	None
009	P001	Vacuum Filter	1985	NA	None
047	Z01	Thickener	1985	NA	None
038A	Z01	Railcar Anti-Freeze Spray	Pre 1974	NA	None
051C	Z01	Stoker Coal Anti-Freeze Spray	Pre 1974	NA	None
S050A	Z01	No. 2 Diesel Fuel Storage Tank 1	1985	5,000 Gallons	None
S050B	Z01	No. 2 Diesel Fuel Storage Tank 2	1985	3,000 Gallons	None
S050C	Z01	No. 2 Diesel Fuel Storage Tank 3	1985	3,000 Gallons	None
S050D	Z01	No. 2 Diesel Fuel Storage Tank 4	1985	1,000 Gallons	None
S050E	Z01	Froth Flotation Agent Storage Tank 1	1985	5,000 Gallons	None
S050F	Z01	Anionic Flocculant Storage Tank 1	1985	1,000 Gallons	None
S050G	Z01	Antifreeze Storage Tank 1	1985	8,000 Gallons	None
S050H	Z01	Antifreeze Storage Tank 2	1985	8,000 Gallons	None
S050I	Z01	Dustrol Storage Tank 1	1985	1,600 Gallons	None
S050J	Z01	Dustrol Storage Tank 2	1985	1,600 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
S050K	Z01	30 wt. Motor Oil Storage Tank 1	1985	580 Gallons	None
S050L	Z01	30 wt. Motor Oil Storage Tank 2	1985	580 Gallons	None
NA	None		Underground Mine	NA	Pre-1974

[1] PE – Partial Enclosure, FE – Full Enclosure, ST – Stacking Tube, WT – Water Truck, MC – Moisture Content.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0760D	May 12, 2008

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. **[45CSR§30-5.1.b.]**

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. **[45CSR§30-4.1.a.3.]**

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. **[45CSR§30-6.3.b.]**

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. **[45CSR§30-6.3.c.]**

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. **[45CSR§30-5.1.f.3.]**

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.2. Monitoring Requirements

3.2.1. None

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-0760, 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. None

4.0 Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. Emissions from the permitted fluidized bed coal dryer stack shall not exceed the following rates:

Pollutant	pounds/hour	tons/year
Particulate Matter (PM)[1]	40.0	120.0
Sulfur Dioxide (SO_2)	195.0	586.0
Nitrogen Oxides (NO_x)	63.6	190.8
Volatile Organic Compounds (VOC)	135.6	406.8
Carbon Monoxide (CO)	57.6	172.8

[1]All PM emissions are assumed to be $PM_{2.5}$ or smaller.

(045A, 045C) **[45CSR13, R13-0760, 4.1.1]**

4.1.2. Operation of the thermal dryer shall be in accordance with the following requirements:

a. The furnace shall be limited to a maximum combustion rate of 4.35 tons-coal/hour and 26,100 tons-coal/year (rolling twelve month basis).

b. The furnace shall be limited to a maximum combustion rate of 3,033 cubic feet-coal bed methane or natural gas/hour and 1.82×10^6 cubic feet-coal bed methane or natural gas/year (rolling twelve month basis).

c. The sulfur content of the coal fired in the furnace shall not exceed 3.4% by weight.

d. Coal combustion shall be limited to providing 120 MMBtu/hr heat input into the furnace.

e. At all times coal combustion is providing over 90 MMBtu/hr heat input into the furnace a 20% solution of sodium hydroxide (NaOH) shall be sprayed downstream of the venturi scrubber to provide for additional SO_2 control.

f. Additional heat input to the furnace above 120 MMBtu/hr shall be provided by the combustion of coal bed methane or natural gas.

g. Heat input to the furnace shall not exceed 182 MMBtu/hr.

h. The scrubber shall be operated at all times coal is combusted in the furnace.

(045A, 045C) **[45CSR13, R13-0760, 4.1.2]**

4.1.3. The permittee shall not cause to be discharged into the atmosphere from any thermal dryer gases which:

a. Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).

b. Exhibit 20 percent opacity or greater.

Compliance with the 20 percent opacity limit of 40 C.F.R. §60.252(a) shall demonstrate compliance with the less stringent opacity limits of 45CSR§§5-3.1, 3.2, and 3.3. *(045A, 045C)* **[45CSR13, R13-0760, 4.1.3 and 4.1.5; 45CSR16; 40 C.F.R. §60.252(a); 45CSR§§5-3.1, 3.2, 3.3 and 4.1.a]**

4.1.4. No person shall circumvent 45CSR5 by adding additional gas to any dryer exhaust or group of dryer exhausts for the purpose of reducing the grain loading. *(045A, 045C)* **[45CSR§5-4.2]**

4.1.5. No person shall cause, suffer, allow or permit the exhaust gases from a thermal dryer to be vented into the open air at an altitude of less than eighty (80) feet above the foundation grade of the structure containing the dryer or less than ten (10) feet above the top of said structure or any adjacent structure, whichever is greater. In determining the desirable height of the plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate and good engineering practice as set forth in 45CSR20. *(045A, 045C)* **[45CSR§5-4.3]**

4.1.6. No person shall cause, suffer, allow, or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 ppm_v by volume from existing source operations. *(045A, 045C)* **[45CSR§10-4.1]**

4.1.7. The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. *(002, 052, 053, 034, 035, 036, 036B, 030, 044, 031, 030A, 044A, 031A, 018, 038A, 032, 033, 027)* **[45CSR13, R13-0760, 4.1.4 and 4.1.6; 45CSR16; 40 C.F.R. §60.254(a); 45CSR§5-3.4]**

4.1.8. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater. *(001, 005, 006, 008, 037, 051A, 046, 048, 013, 015, 017, 020, 021, 023, 027A, 025)* **[45CSR13, R13-0760, 4.1.4; 45CSR§5-3.4]**

4.1.9. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. **[45CSR16; 40 C.F.R. §60.11d]**

4.1.10. In order to prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by the following:

a. Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse.

b. Coal refuse disposal areas shall not be so located with respect to mine openings, tipples or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas.

c. Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site.

d. Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution.

e. Materials with low ignition points used in the production or preparation of coal, including, but not limited to, wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area.

f. Garbage, trash, household refuse and like materials shall not be deposited on or near any coal refuse disposal area.

g. The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.

(012) **[45CSR§§5-7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8]**

4.1.11. Each burning coal refuse disposal area which allegedly causes air pollution shall be investigated by the Director in accordance with the following:

a. Each coal refuse disposal area which causes air pollution shall be considered on an individual basis by the Director. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, as well as the established facts and circumstances of the particular case, the Director shall determine and may order after a proper hearing the effectuation of those air pollution control measures which are adequate for each such coal refuse disposal area.

b. With respect to all burning coal refuse disposal areas, the person responsible for such coal refuse disposal areas or the land on which such coal refuse disposal areas are located shall use due diligence to control air pollution from such coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, as amended, the Director shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the Director establishes that air pollution exists or may be created, the person responsible for such coal refuse disposal area or the land on which such coal refuse disposal area is located shall submit to the Director a report setting forth satisfactory methods and procedures to eliminate, prevent, or reduce such air pollution. The report shall be submitted within such time as the Director shall specify. The report for the elimination, prevent or reduction of air pollution shall contain sufficient information, including completion dates, to establish that such program can be executed with due diligence. If approved by the Director, the corrective measures and completion dates shall be embodied in a consent order issued pursuant to W. Va. Code §§22-5-1 et seq. If such report is not submitted as requested

or if the Director determines that the methods and procedures set forth in such report are not adequate to reasonably control such air pollution, then a hearing will be held pursuant to the procedures established by W. Va. Code §22-5.

(012) **[45CSR§§5-8.1, 8.2, 8.3]**

4.1.12. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air. All fugitive dust control systems shall remain functional year-round, to the maximum extent practicable, including winter months and cold weather. **[45CSR§5-6.1; 45CSR§30-12.7]**

4.1.13. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operation practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment. **[45CSR§5-6.2]**

4.2. Monitoring Requirements

4.2.1. For the purposes of demonstrating compliance with maximum coal and coal bed methane or natural gas usage limits set forth in 4.1.2.a and 4.1.2.b, respectively, the permittee shall maintain monthly and rolling twelve month records of the amount of coal and coal bed methane or natural gas usage that is consumed by the furnace. **[45CSR13, R13-0760, 4.2.1]**

4.2.2. For the purposes of demonstrating continuing compliance with the coal sulfur content under 4.1.2.c, the permittee shall daily obtain a composite sample of coal to be combusted in the thermal dryer furnace. This sample shall be tested according to the appropriate test methods as approved in a protocol submitted pursuant to 3.3.1.c to determine the sulfur content of the coal. **[45CSR13, R13-0760, 4.2.2; 45CSR§10-8.2.c]**

4.2.3. The permittee shall install, evaluate, operate, and maintain instrumentation to measure the heat input into the furnace. **[45CSR13, R13-0760, 4.2.3]**

4.2.4. Instruments will be installed for continuously measuring the pH of the scrubber inlet water and effluent water and pH monitors will be installed in the operating room so that the dryer operator can maintain the necessary influent pH to attain the required minimum SO_2 removal efficiency. The pH monitoring devices shall be certified by the manufacturer to be accurate within 0.1 pH units. The pH of the scrubber inlet water and effluent water shall be maintained above 3.4. An excursion shall be defined as when the pH values of the scrubber inlet water and/or effluent water are below 3.4. When an excursion occurs, the permittee shall conduct an inspection of the scrubber and corrective action shall be taken to return the pH values to the operating range established during the performance testing. The instruments used to monitor the pH shall be recalibrated quarterly in accordance with the manufacturer's recommendations. **[45CSR13, R13-0760, 4.2.4; 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]**

4.2.5. The permittee shall install flow straightening devices in the stack of the Loveridge fluidized bed thermal dryer to insure that cyclonic flow does not occur. **[45CSR13, R13-0760, 4.2.5; 45CSR§5-12.6]**

4.2.6. For the purpose of determining compliance with the opacity limits of 45CSR5 and 40 C.F.R. 60, Subpart Y (4.1.3, 4.1.7, and 4.1.8), the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

a. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. 60, Appendix A, Method 9 certification course.

b. Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but not less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of facility operation and appropriate weather conditions.

c. If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

[45CSR13, R13-0760, 4.2.6; 45CSR§5-12.4]

4.2.7. The permittee shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

a. A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ± 1.7 °C (± 3 °F). During normal operations, the temperature of the gas stream at the exit of the thermal dryer is maintained between 120 and 220 °F. A temperature outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the thermal dryer and corrective action shall be taken to return the temperature to an operating range of less than 220 °F and greater than 120 °F.

b. For affected facilities that use venturi scrubber emission control equipment:

(1) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge. During normal operations, the pressure loss through the venturi constriction of the scrubber is maintained between 26 and 40 inches of H_2O. A pressure loss outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the

venturi scrubber and corrective action shall be taken to return the pressure loss to an operating range of greater than 26 inches of H_2O and less than 40 inches of H_2O.

(2) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of the design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator may be consulted for approval of alternative locations. During normal operations, the water pressure to the scrubber is maintained between 15 and 25 psi. A water pressure outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the venturi scrubber and corrective action shall be taken to return the water pressure to an operating range of greater than 15 psi and less than 25 psi.

[45CSR13, R13-0760, 4.2.7; 45CSR16; 40 C.F.R. §60.256(a)(1); 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]

4.2.8. All monitoring devices under 4.2.7 are to be recalibrated annually in accordance with procedures in 40 C.F.R. §60.13(b). **[45CSR13, R13-0760, 4.2.8; 45CSR16; 40 C.F.R. §60.256(a)(2)]**

4.2.9. **Proper maintenance (CAM).** At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. **[45CSR§30-5.1.c. and 40C.F.R. §64.7(b)]** *(SCR1)*

4.2.10. **Continued operation (CAM).** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[45CSR§30-5.1.c. and 40C.F.R. §64.7(c)] *(SCR1)*

4.2.11. **Response to excursions or exceedances (CAM).**

(1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[45CSR§30-5.1.c. and 40 C.F.R. §64.7(d)] *(SCR1)*

4.2.12 **Documentation of need for improved monitoring (CAM).** After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[45CSR§30-5.1.c. and 40 C.F.R. §64.7(e)] *(SCR1)*

4.2.13. **Documentation of need for improved monitoring (CAM).** (a) After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(b) Elements of a QIP:

(1) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

(2) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.

(ii) Process operation changes.

(iii) Appropriate improvements to control methods.

(iv) Other steps appropriate to correct control performance.

(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (b)(2)(i) through (iv) of this section).

(c) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements

contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(d) Following implementation of a QIP, upon any subsequent determination pursuant to § 64.7(d)(2) the Administrator or the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(e) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[45CSR§30-5.1.c. and 40 C.F.R. §64.8] *(SCR1)*

4.3. Testing Requirements

4.3.1. Notwithstanding any other testing requirements, the permittee shall conduct or have conducted performance test(s) on Thermal Dryer to determine compliance with the SO_2 emission limit under 4.1.1. The test shall be performed according to the following conditions:

a. The sulfur content of the coal fired in the furnace be, at a minimum, 3.4% by weight.

b. SO_2 emissions shall be determined when the furnace is operating at the following scenarios:

(1) Combusting only coal at a heat input of 90 MMBtu/hr with no introduction of NaOH downstream of the scrubber.

(2) Combusting only coal at a heat input of 120 MMBtu/hr with an introduction of a 20% solution of NaOH downstream of the scrubber.

(3) At a furnace heat input of 182 MMBtu/hr with coal providing 120 MMBtu/hr and coal bed methane providing 62 MMBtu/hr and with an introduction of a 20% solution of NaOH downstream of the scrubber.

c. Testing shall occur according to the schedule given in the following table:

(1) Within 180 days after the May 12, 2008 issuance date of R13-0760D, the permittee shall conduct or have conducted performance test(s) while operating at the conditions described under 4.3.1.b.(1).

(2) Within 180 days of operating the furnace at a heat input greater than 95 mmBtu/hr, the permittee shall conduct or have conducted performance test(s) while operating at the conditions described under 4.3.1.b.(2).

(3) Within 180 days of operating the furnace at a heat input greater than 125 mmBtu/hr, the permittee shall conduct or have conducted performance test(s) while operating at the conditions described under 4.3.1.b.(3).

[45CSR13, R13-0760, 4.3.1]

4.3.2. The test required under 4.3.1 shall be in accordance with 3.3.1. **[45CSR13, R13-0760, 4.3.2]**

4.3.3. For the purpose of demonstrating compliance with the particulate matter emission limits of 4.1.1 and 4.1.3 for the Thermal Dryer (045A/045C), the permittee shall conduct stack testing. All tests to determine compliance with exhaust gas dust concentrations and particulate matter mass emission rates shall be conducted in accordance with Methods 1-5 of 40 C.F.R. 60, Appendix A, provided that all compliance tests must consist of not less than three (3) test runs, and the sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

Parameter indicator ranges shall be established for the exit temperature of the thermal dryer, water supply pressure to the control equipment, and the pressure loss through the venturi constriction of the scrubber. The permittee shall establish these indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The permittee shall also record the following parameters during each testing:

a. Opacity readings on the exhaust stack following the procedures of Method 9;
b. Amount of coal burned and the amount of coal dried;
c. Coal drying temperature and residence time in the dryer;
d. Temperature of the gas stream at the exit of the thermal dryer;
e. Flow rate through the dryer and converted to dry standard cubic feet;
f. Water pressure to the control equipment; and
g. Pressure loss of the inlet air flow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

Subsequent testing to determine compliance with the particulate loading limitations of 4.1.1 and 4.1.3 shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50 % and 90% of particulate loading limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤ 50 % of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤ 50 % of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥ 90 % of particulate loading limit	Annual
Once/5 years	If testing is required once/5 years and any test indicates mass emission rates between 50 % and 90 % of particulate loading limit	Once/3 years
Once/5 years	If testing is required once/5years and any test indicates a mass emission rate ≥ 90 % of particulate loading limit	Annual

These records shall be maintained on site.

Note: In the last stack testing performed on September14, 2011, the average particulate matter emission rates were 18 lb/hr and 0.014gr/dscf, which are less than 50 % of the 4.1.1 hourly particulate matter emission limit of 40 lb/hr and the 4.1.3 40 C.F.R. 60, Subpart Y limit of 0.031gr/dscf. Therefore, subsequent stack testing for Thermal Dryer (045A/045C) must be conducted on or before September 14, 2016.

The current parameter indicator ranges are as follows:

a. Temperature of the gas stream at the exit of the Thermal Dryer: 120 - 220 °F.
b. Pressure loss through the venturi constriction of the Scrubber: 26 – 40 inches of H_2O.
c. Water supply pressure to the Scrubber: 15 - 25 psi.

[45CSR§5-12.1; 45CSR16; 40 C.F.R. §60.257(b); 45CSR§30-5.1.c]

4.3.4. To demonstrate compliance with the emission limits of 4.1.1 for the Thermal Dryer (045A/045C), the permittee shall conduct performance test(s) for SO_2, NO_x, VOC, and CO at least once every 5 years. Testing shall be conducted in accordance with 3.3.1. **[45CSR§30-5.1.c; 45CSR§5-12.2; 45CSR§§10-8.1.a and 8.1.b]**

4.3.5 (a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by § 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in § 60.257. **[40 CFR§ 60.255(a), 45CSR16]**

4.3.6 (a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A-4 of this part and the procedures in § 60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 CFR§ 60.257(a), 45CSR16]

4.4. Recordkeeping Requirements

4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. **[45CSR13, R13-0760, 4.4.2]**

4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-0760, 4.4.3]

4.4.3. An example form for the Monthly Opacity Testing is included as Appendix A. The Certification of Data Accuracy statement shall be completed within fifteen (15) days of the end of the reporting period. These records shall be maintained on-site for at least five (5) years and be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request. **[45CSR13, R13-0760, 4.4.4]**

4.4.4. The permittee shall maintain records of all monitoring data required by Section 4.2.6 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80 °F, 6-10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent. **[45CSR13, R13-0760, 4.4.5]**

4.4.5. The temperature of the gas stream at the exit of the thermal dryer shall be continuously recorded on a chart recorder and manually recorded at least once every 12 hours. Records shall be maintained in accordance with 3.4.1. In addition to records of the gas stream temperature, the permittee shall document and maintain records of all periods when the temperature falls outside the range specified in 4.2.7.a and any corrective actions taken during these periods. Maintenance and malfunction records for the thermal dryer and venturi scrubber shall be maintained in accordance with 4.4.1 and 4.4.2. *(045A/045C)* **[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]**

4.4.6. The pressure loss through the venturi constriction of the scrubber shall be continuously recorded on a chart recorder and manually recorded at least once every 12 hours. Records shall be maintained in accordance

with 3.4.1. In addition to records of the pressure loss, the permittee shall document and maintain records of all periods when the pressure loss through the venturi constriction of the scrubber falls outside the range specified in 4.2.7.b(1) and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.1 and 4.4.2. *(045A/045C)* **[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]**

4.4.7. The water supply pressure to the scrubber shall be continuously recorded on a chart recorder and manually recorded at least once every 12 hours. Records shall be maintained in accordance with 3.4.1. In addition to records of the water supply pressure to the scrubber, the permittee shall document and maintain records of all periods when the water supply pressure falls outside the range specified in 4.2.7.b(2) and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.1 and 4.4.2. *(045A/045C)* **[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]**

4.4.8. The pH of the scrubber inlet water and effluent water shall be continuously recorded on a chart recorder and manually recorded at least once every 12 hours. Records shall be maintained in accordance with 3.4.1. In addition to records of the pH of the scrubber inlet water and effluent water, the permittee shall document and maintain records of all periods when the pH of the scrubber inlet water and effluent water falls outside the range established in 4.2.4 and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.1 and 4.4.2. *(045A/045C)* **[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]**

4.4.9. For Compliance Assurance Monitoring (CAM), the owner or operator shall comply with the recordkeeping requirements of permit conditions 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance, or corrective actions). *(045A/045C)* **[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]**

4.4.10. The permittee shall maintain a record of all monitoring data used to prepare the quarterly "Monitoring Summary, Excursion and Monitoring Plan Performance Report" required under Condition 4.5.4. Such records shall be maintained in accordance with 4.4.1 and 4.4.2. **[45CSR§10-8.3.a]**

4.4.11. The permittee shall inspect all fugitive dust control systems weekly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of such inspections and of all scheduled and non-scheduled maintenance. Records shall be maintained stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. **[45CSR§30-5.1.c]**

4.4.12. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. **[45CSR§30-5.1.c]**

4.5. Reporting Requirements

4.5.1. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality and the Associate Director – Office of Air Enforcement and Compliance Assistance (3AP20) of the USEPA a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to

take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director and the Associate Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director and the Associate Director no more than sixty (60) days after the date the testing takes place. **[45CSR13, R13-0760, 4.5.1]**

4.5.2. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observation using 40 C.F.R. 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned. **[45CSR13, R13-0760, 4.5.2]**

4.5.3. For CAM, monitoring reports shall be submitted to the director and at a minimum shall include and be in accordance with information in permit conditions 3.5.6 and 3.5.8, as applicable. Also, at a minimum, the following information, as applicable, shall be included:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(045A/045C) **[40 C.F.R. §64.9(a); 45CSR§30-5.1.c]**

4.5.4. On a quarterly basis, the permittee shall prepare and submit a report titled "Monitoring Summary, Excursion and Monitoring Plan Performance Report" detailing the status of compliance with the 2,000 ppm_v sulfur dioxide emission limit in Condition 4.1.6. The report shall provide the volumetric flow rate of the thermal dryer's exhaust fan (SCFM), the hours of operation of the thermal dryer (hours/month), the total coal burned (tons/month and tons/hour), the percent sulfur in the coal (%S as determined by Condition 4.2.2), calculated SO_2 emissions (lb/hr and ppm_v), shall state whether the source was in compliance with the 2,000 ppm_v limit for the month, and shall indicate any excursions which occurred during each month. **[45CSR§30-5.1.c; 45CSR§10-8.3.b]**

4.5.5 (b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

[40 C.F.R§§60.258(b)(1) and (b)(3), 45CSR16]

4.6. Compliance Plan

4.6.1. None.

Appendix A[1]
Monthly Opacity Testing Records

Date of Observation: _____
Date Entered by: _____
Reviewed by: _____
Date Reviewed: _____
Describe the General Weather Conditions: _____

Stack ID/Vent ID/ Emission Point ID	Stack/Vent/Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Months of Visual Emissions	Comments

(1) The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. All records shall be kept on site for a period of no less than five (5) years and shall be made available to the Secretary or his or her duly authorized representative upon request.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ _____

Name and Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

1 This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Monongalia County Mine

54-061-00016

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West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

ID # R30-06100016-2013
Reg 30
Company CONSOL
Facility BLACKSVILLE #2 Initials WA

Pursuant to
Title V
of the Clean Air Act

Issued to:
Consolidation Coal Company
Blacksville No. 2
R30-06100016-2013

Entire Document
NON-CONFIDENTIAL

John A. Benedict
Director

Issued: July 9, 2013 • Effective: July 23, 2013
Expiration: July 9, 2018 • Renewal Application Due: January 9, 2018

Permit Number: **R30-06100016-2013**
Permittee: **Consolidation Coal Company**
Facility Name: **Blacksville No. 2**
Permittee Mailing Address: **P.O.Box 24**
Wana, WV 26590

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Wana, Monongalia County, West Virginia
Facility Mailing Address:	Same as above
Telephone Number:	304-285-2242
Type of Business Entity:	Corporation
Facility Description:	Coal Preparation Plant with Thermal Dryer
SIC Codes:	1222
UTM Coordinates:	560.47 km Easting • 4395.78 km Northing • Zone 17

Permit Writer: U.K.Bachhawat

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 8

3.0. Facility-Wide Requirements and Permit Shield 17

Source-specific Requirements

4.0. Preparation Plant, Refuse Disposal Area, Transfer Points, Thermal Dryer, Haulroads, Storage Silos; 001A, 001B, 003, 005, 007, 007A, 008, 010, 012, 012A, 013, 015, 016, 018, 020, 022, 024, 033, 034, 036, 037C, 038, 046-048, 050, 052, 052A, 052B, 052C, 052D, 052F, 052G, 052H, 052I, 052J, 052K, 052L, 052M, 055, 056, CB18, CB18A, CB19, CB20, CR1, TLB 23

Appendix A..... Monthly Report for Thermal Dryer Emissions

Appendix B.....Daily Throughput of Coal on Conveyors CB3 and CB16 combined to the Preparation Plant

Appendix C..... Certified Daily and Monthly Water Usage By The Pressurized Water Truck

Appendix D.....Weekly Opacity Record

Appendix E.....CEMS Summary Report

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Source ID	Emission Point ID	Equipment Description	Maximum Design Capacity		Date of Construction, Reconstruction or Modification [1]	Fugitive Dust Control System/ Control Device [2]	Control Device ID	Associated Emission Points		
			TPH	TPY x 10^6				ID No.	Transfer Description	Fugitive Dust Control System/ Control Device [2]
					RAW COAL CIRCUIT					
001B	Z01	**Screen 1** – Screening of run of mine raw coal at mine's skip shaft	1,800	10.0	M 2006 C 2000	FE	NA	001	Raw coal from mine to Screen/Crusher Unit	FE
								002	Screened/crushed coal to Conveyor CB1	FE
001A	Z01	**Crusher 1** – Crushing of run of mine raw coal at mine's skip shaft	1,800	10.0	M 2006 C 2000	FE	NA	001	Raw coal from mine to Screen/Crusher Unit	FE
								002	Screened/crushed coal to Conveyor CB1	FE
003	Z01	**Conveyor CB1** - Belt from Screen/Crusher Building to Conveyor CB2 in Raw Coal (RC) Transfer Building	1,800	10.0	M 2006 C 2000	PE	NA	004	Raw coal (RC) from Conveyor CB1 to Conveyor CB2 or Run of Mine Bin	FE
007A		**Run of Mine Bin** - receives raw coal from Conveyor CB1 and loads it to truck/pan - 300 ton capacity	1,800	10.0	M 2006	FE	NA	027	Raw Coal (RC) from Run of Mine Bin to truck/pan for transport to stockpiles	N
005	Z01	**Conveyor CB2** - Belt from RC Transfer Building to Run of mine Silo 1	1,800	10.0	M 2006 C 2000	PE	NA	006	RC from Conveyor CB2 to Run of Mine Silo 1 load-in	FE
007	Z01	**Run of Mine Silo 1** - (Capacity 6,000 tons)	1,800 in 1,500 out	10.0	M 2006 C 1970	FE	NA	007A	Run of Mine Silo 1 reclaim to Conveyor CB15	PE
047	Z01	**Conveyor CB15** - Belt from pan/truck dump reclaim feeder and Run of Mine Silo 1 to Conveyor CB3 (plant feed) or Conveyor CB7	1,500	1.24	2000	PE	NA	031	Stockpile reclaim to Conveyor CB15	N
								047A	Transfer from Conveyor CB15 to Conveyor CB3 or Conveyor CB7	FE
008	Z01	**Conveyor CB3** - Belt from Conveyor CB15 to Preparation Plant	1,500	10.0	2000	PE	NA	008A	RC from Conveyor CB3 to Preparation Plant	FE
016	Z01	**Conveyor CB7** - Belt from Conveyor CB15 to Conveyor CB8 (see Clean Coal Circuit)	1,500	6.0	1970	PE	NA	016A	RC from Conveyor CB7 to Conveyor CB8	PE
055	Z01	**Conveyor CB16** - Belt from Clean/Raw Coal Stockpile 1 reclaim feeder to Preparation Plant	1,500	1.3	1996	PE	NA	055A	Clean/Raw Coal Stockpile reclaim feeder to Conveyor CB16	N
					STOCKPILES					
029	Z01	**Clean/Raw Coal Stockpile 1** - Stockpile footprint is 13 acres with a storage capacity of approximately 900,000 tons.	NA	2.0	2000	MC	NA	028	CC/RC Stockpile 1 coal loadin from pan	MC
								030	CC/RC Stockpile 1 coal loadout to pan	MC
039	Z01	**Raw Coal Stockpile 1** - Stockpile footprint is 9.9 acres with a storage capacity of approximately 480,000 tons.	NA	1.0	1990	MC	NA	040	RC Stockpile 1 coal loadin from pan	MC
								041	RC Stockpile 1 coal loadout to pan	MC
								041A	Grading RC Stockpile 1	MC
042	Z01	**Raw Coal Stockpile 2** - Stockpile footprint is 3.3 acres with a storage capacity of approximately 90,000 tons.	NA	0.2	1990	MC	NA	043	RC Stockpile 2 coal loadin from pan	MC
								044	RC Stockpile 2 coal loadout to pan	MC
								044A	Grading RC Stockpile 2	MC

Source ID	Emission Point ID	Equipment Description	Maximum Design Capacity		Date of Construction, Reconstruction or Modification [1]	Fugitive Dust Control System/ Control Device [2]	Control Device ID	Associated Emission Points		
			TPH	TPY x 10^6				ID No.	Transfer Description	Fugitive Dust Control System/ Control Device [2]
					THERMAL DRYER CIRCUIT					
033	Z01	**Conveyor CB11** - Belt from Preparation Plant to Conveyor CB13 in Thermal Dryer Transfer Building	650	4.2	2000	PE	NA	035A	Wet coal from Conveyor CB11 to Conveyor CB13 (feed to thermal dryer)	FE
								035B	Wet coal from Conveyor CB11 to Conveyor CB12 (by-pass of thermal dryer)	FE
036	Z01	**Conveyor CB13** - Belt from Conveyor CB11 in Thermal Dryer Transfer Building to Thermal Dryer	650	4.2	1984	PE	NA	036A	Wet coal from Conveyor CB13 to Thermal Dryer	FE
037C	P002	**Thermal Dryer** Manufacture: Heyl-Patterson Type: Fluidized Bed Dryer Furnace Manufacturer: Bigelow – Liptak with a single forced draft burner. Design BTU Rating: 115 x 10^6 Btu/hr. Max operation of 5,850 hours/year	650	4.2	1984	Cyclones (4 parallel cyclone collectors) Scrubber (Horizontal Venturi Scrubber)	Cyclones Scrubber	035C	Dried Coal from Thermal Dryer to Conveyor CB14	FE
038	Z01	**Conveyor CB14** - Belt from Thermal Dryer to Conveyor CB12 in Thermal Dryer Transfer Building	650	4.2	1984	PE	NA	035D	Dried coal from Conveyor CB14 to Conveyor CB12	FE
034	Z01	**Conveyor CB12** - Belt from Conveyor CB14 in Thermal Dryer Transfer Building to Preparation Plant	650	4.2	2000	PE	NA	034A	Conveyor CB12 to Conveyor CB6 within the Preparation Plant	PE
					CLEAN COAL CIRCUIT					
010	Z01	**Conveyor CB4** - Belt from Preparation Plant to Clean Coal (CC) Silo 1 or Sample Conveyor CB19	1,500	4.18	2000	PE	NA	011	CC from Conveyor CB4 to Clean Coal Silo 1	FE
								STP1	CC from Conveyor CB4 to Conveyor CB19	PE
013	Z01	**Conveyor CB6** - Belt from Preparation Plant to Clean Coal (CC) Silo 2 or Sample Conveyor CB19	1,500	3.42	2000	PE	NA	014	CC from Conveyor CB6 to Clean Coal Silo 2	FE
								STP2	CC from Conveyor CB6 to Sample Conveyor CB19	PE
CB19	CB19	**Sample Conveyor CB19** - Sample Belt from Conveyor CB4 and CB6 (see below) to Sample Crusher CR1	5	0.0438	C 1989	PE	NA	STP3	CC from Sample Conveyor CB19 to Sample Crusher CR1	PE
CR1	CR1	**Sample Crusher CR1** - crushes CC from Sample Conveyor CB19	5	0.0438	C 1989	FE	NA	STP4	CC from Sample Crusher CR1 to Sample Conveyor CB20	FE
CB20	CB20	**Sample Conveyor CB20** - Sample Belt from Sample Crusher CR1 back to Conveyors CB4 or CB6	5	0.0438	C 1989	PE	NA	STP5	CC from Sample Conveyor CB20 back to Conveyor CB6	PE
								STP6	CC from Sample Conveyor CB20 back to Conveyor CB4	PE
012	Z01	**Clean Coal Silo 1** - (Capacity 14,000 t)	1,500	4.18	1970	FE	NA	012B	CC from CC silo 1 to Conveyor CB5	PE
012A	Z01	**Conveyor CB5** - CC Silo 1 reclaim conveyor	3,000	4.18	1970	FE	NA	017A	CC from Conveyor CB5 to Conveyor CB9 (see below) or Conveyor CB18	PE
CB18	CB18	**Conveyor CB18** - CC truck loadout conveyor	1,000	1.0	C 2011	PE	NA	TLTP1	CC from Conveyor CB18 to Conveyor CB18A	PE
CB18A	CB18A	**Conveyor CB18A** - CC truck loadout conveyor	1,000	1.0	C 2011	PE	NA	TLTP2	CC from Conveyor CB18A to Truck Loadout Bin TLB	PE
TLB	TLB	**Truck Loadout Bin TLB** - 100 ton capacity	1,000	1.0	C 2011	FE	NA	TLTP3	CC from Truck Loadout Bin TLB to trucks	MD

Source ID	Emission Point ID	Equipment Description	Maximum Design Capacity		Date of Construction, Reconstruction or Modification [1]	Fugitive Dust Control System/ Control Device [2]	Control Device ID	Associated Emission Points		
			TPH	TPY x 10^6				ID No.	Transfer Description	Fugitive Dust Control System/ Control Device [2]
015	Z01	**Clean Coal Silo 2** - (Capacity 12,000 t)	1,500	3.42	1970	FE	NA	015A	CC from CC silo 2 to Conveyor CB8	FE
018	Z01	**Conveyor CB8** - CC Silo 2 reclaim conveyor	3,000	3.42	1970	FE	NA	017B	CC from Conveyor CB8 and direct ship from Conveyor CB7 (see Raw Coal Circuit) to Conveyor 9	PE
046	Z01	**Conveyor CB9** - Rail Loadout Feed Belt - from Conveyors CB5 and CB8 to Rail Loadout Bin	3,000	7.6	1970	PE	NA	019	CC from Conveyor CB9 to Rail Loadout Bin	PE
020	Z01	**Rail Loadout Bin** - (Capacity - 100 tons)	3,000	7.6	1970	FE	NA	021	Rail Loadout Bin to Railcar	PE
								045	Rail Loadout Bin to Trucks/Pan	PE
					REFUSE CIRCUIT					
022	Z01	**Conveyor CB10** - Belt from Preparation Plant to Refuse Loadout Bin1	650	5.694	M 2011 C 2000	PE	NA	023	Refuse from Conveyor CB10 to Refuse Loadout Bin 1	PE
024	Z01	**Refuse Loadout Bin 1** - (Capacity – 100 tons)	650	5.694	M 2011 C 1970	FE	NA	025	Refuse from Refuse Loadout Bin 1 to Refuse Vehicle	MC
								025A	Refuse from Refuse Loadout Bin 1 to Conveyor CB17	PE
056	Z01	**Conveyor CB17**- Belt from Refuse Loadout Bin 1to Refuse Loadout Bin2	650	5.694	2004	PE	NA	057	Refuse from Conveyor CB17 to Refuse Loadout Bin 2	PE
058	Z01	**Refuse Loadout Bin 2** - (Capacity – 100 tons)	650	5.694	2004	FE	NA	059	Refuse from Refuse Loadout Bin 2 to Refuse Vehicle	MC
					HAULROADS					
052A	Z01	**Haulroads**-Unpaved Roads - refuse vehicle to disposal area full.	NA	NA	2000	WT	NA	026	Transfer of coarse refuse from haul vehicle to disposal area	MC
								032A	Grading of Refuse Disposal Area	MC
052B	Z01	**Haulroads**-Unpaved Roads - refuse vehicle from disposal area empty.	NA	NA	2000	WT	NA			
052C	Z01	**Haulroads**-Unpaved Roads - Clean Coal to/from CC/RC Stockpile 1/ empty	NA	NA	2000	WT	NA			
052D	Z01	**Haulroads**-Unpaved Roads - Clean Coal to/from CC/RC Stockpile 1/ full	NA	NA	2000	WT	NA	028	CC/RC Stockpile 1 coal loadin from pan	MC
								030	CC/RC Stockpile 1 coal loadout to pan	MC
052	Z01	**Haulroads**-Unpaved Roads - Raw Coal to/from Raw Coal Stockpile #1 / empty	NA	NA	1990	WT	NA			
052F	Z01	**Haulroads**-Unpaved Roads - Raw Coal to/from Raw Coal Stockpile #1 / full	NA	NA	1990	WT	NA	040	RC Stockpile 1 coal loadin from pan	MC
								41	RC Stockpile 1 coal loadout to pan	MC
052G	Z01	**Haulroads**-Unpaved Roads - Raw Coal to/from Raw Coal Stockpile #2/ empty	NA	NA	1990	WT	NA			
052H	Z01	**Haulroads**-Unpaved Roads - Raw Coal to/from Raw Coal Stockpile #2/ full	NA	NA	1990	WT	NA	043	RC Stockpile 2 coal loadin from pan	MC
								044	RC Stockpile 2 coal loadout to pan	MC
052I	Z01	**Haulroads**-Unpaved Roads - Empty trucks to truck loadout	NA	NA	1970	WT	NA			
052J	Z01	**Haulroads**-Unpaved Roads - Full trucks from truck loadout	NA	NA	1970	WT	NA	045	Rail Loadout Bin to Trucks/Pan	PE

Source ID	Emission Point ID	Equipment Description	Maximum Design Capacity		Date of Construction, Reconstruction or Modification [1]	Fugitive Dust Control System/ Control Device [2]	Control Device ID	Associated Emission Points		
			TPH	TPY x 10^6				ID No.	Transfer Description	Fugitive Dust Control System/ Control Device [2]
052K	Z01	**Haulroads**-Unpaved Roads - Clean Coal to/from CC/RC Stockpile #1 / full	NA	NA	2000	WT	NA	28	CC/RC Stockpile 1 coal loading from pan	MC
								30	CC/RC Stockpile 1 coal loadout to pan	MC
052L	Z01	**Haulroads**-Unpaved Roads - Clean Coal to/from CC/RC Stockpile #1 / empty	NA	NA	2000	WT	NA			
052M	Z01	Haulroads - Unpaved Roads - Trucks transporting coal from Truck Loadout Bin TLB	1,000	1.0	C 2011	WT	NA	TLTP3	Transfer of clean coal to trucks for shipment off-site	MD
MISCELLANEOUS										
048	Z01	**Lime Storage Silo 1**	NA	NA	1970	NA	NA			
050	Z01	**Rock Dust Silo 1**	NA	NA	1970	NA	NA			
009B	Z01	**VOC emissions** from prep plant Froth Flotation Cell	NA	NA	2000	NA	NA			
009	P001	**VOC emissions** from prep plant Vacuum Filter	NA	NA	2000	NA	NA			
049	Z01	**VOC emissions** from water treatment Thickener	NA	NA	2000	NA	NA			
020	Z01	**VOC emissions** from rail cars anti-freeze spray	NA	NA	1970	NA	NA			
053A-M	Z01	**VOC working/breathing losses** from liquid chemical and petroleum storage tanks	NA	NA	1970	NA	NA			

[1] In accordance with 40 CFR 60 Subpart Y: all emissions from thermal dryers constructed, re-constructed or modified on or before April 28, 2008 shall be less than 20% opacity; coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified on or before April 28, 2008 shall not discharge gases which exhibit 20 percent opacity or greater; and coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater.

[2] Control Device abbreviations: FE - Full Enclosure; PE - Partial Enclosure; ST - Stacking Tube; WS - Water Sprays; WT - Water Truck; MC - Moisture Control; MD - Minimize Drop Height; N - None; NA - Not Applicable.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0718D	July 13, 2011

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
[45CSR§5-6.1] [45CSR13, R13-0718, 4.1.10]

3.1.10. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased, or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening, and general maintenance to minimize dust generation and atmospheric entrainment.
[45CSR§5-6.2] [45CSR13, R13-0718, 4.1.11]

3.2. Monitoring Requirements

3.2.1. N/A

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the

Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.3.2. All tests to determine compliance with exhaust gas dust concentrations and particulate matter mass emission rates shall be conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A provided that all compliance tests must consist of not less than three (3) test runs, test run duration shall not be less than sixty (60) minutes, and not less than thirty (30) standard cubic feet of exhaust gas must be sampled during each test run.
[45CSR§5-12.1.]

3.3.3. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. **[40 C.F.R. § 60.254; 45CSR16]**

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.] [45CSR13, R13-0718, 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.] [45CSR13, R13-0718, 3.4.2]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. **[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. N/A

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. N/A

4.0 Preparation Plant, Refuse Disposal Area, Transfer Points, Thermal Dryer, Haulroads, Storage Silos [emission unit ID(s): 001A, 001B, 003, 005, 007, 007A, 008, 010, 012, 012A, 013, 015, 016, 018, 020, 022, 024, 033, 034, 036, 037C, 038, 046-048, 050, 052, 052A, 052B, 052C, 052D, 052F, 052G, 052H, 052I, 052J, 052K, 052L, 052M, 055, 056, CB18, CB18A, CB19, CB20, CR1, TLB]

4.1. Limitations and Standards

4.1.1. The sulfur dioxide control system as described in Consolidation Coal Company's September 8, 1992 submission, involving the addition of caustic to the wet coal that feeds the fluidizing bed and the operation of a continuous emission monitoring system, shall be operated continuously when the thermal dryer is in operation.
[45CSR13, R13-0718, 4.1.3] [037C]

4.1.2. The emissions limit for SO_2 shall be set at
(a) 120.7 lbs/hr measured on the basis of a one-hour average
(b) 20.7 tons/month measured on the basis of actual emissions, and
(c) 249.4 tons/year.
[45CSR13, R13-0718, 4.1.4.] [037C]

4.1.3. The thermal dryer will be operated no more than 5,850 hours per year.
[45CSR13, R13-0718, 4.1.5.] [037C]

4.1.4. The following table sets forth the allowable hourly and annual limitations for total particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and volatile organic compounds from the thermal dryer (037C) at emission point P002.

Pollutant	Hourly Emissions (lb/hr)	Annual Emissions (ton/year)
Total Particulate Matter (PM)	24.2	70.8
Carbon Monoxide (CO)	43.2	103
Nitrogen Dioxide (NO_X)	46.6	136
Sulfur Dioxide (SO_2)	120.7	249.4
Volatile Organic Compounds (VOC)	24.6	47.4

[45CSR13, R13-0718, 4.1.6.] [037C]

4.1.5. Throughput of coal from conveyor belts CB3 and CB16 combined into the preparation plant shall not exceed 1,500 tons per hour or 10,000,000 tons per year in raw coal input.
[45CSR13, R13-0718, 4.1.7.] [Preparation Plant]

4.1.6. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used.

The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated. The pump delivering the water, or solution,

shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.

The permittee shall properly install, operate and maintain designed winterization systems for all water trucks and/or water sprays in a manner that all such fugitive dust control systems remain functional during winter months and cold weather.

[45CSR13, R13-0718, 4.1.8.] [052, 052A, 052B, 052C, 052D, 052F, 052G, 052H, 052I, 052J, 052K, 052L, 052M]

4.1.7. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-0718, R13-0718A, R13-0718B, R13-0718C, R13-0718D and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-0718, 2.5.1.]

4.1.8. **Standards for Particulate Matter.** On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.
[40 C.F.R. § 60.254(a); 45CSR13, R13-0718, 4.1.16; 45CSR16] [001B, 001A, 003, 005, 007, 007A, 008, 010, 013, 033, 034, 036, 038, 047, 055, 056, 058, CB19, CB20 & CR1]

4.1.9. **Standards for Particulate Matter.** On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the following requirements:

(1) Except as provided in paragraph (3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.
(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).
(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (1) of this section.

[40 C.F.R. § 60.254(b); 45CSR13, R13-0718, 4.1.17; 45CSR16] [CB18, CB18A, TLB, 022, 024]

4.1.10. The permittee shall not cause to be discharged into the atmosphere from any thermal dryer gases that:
(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).
(2) Exhibit 20 percent opacity or greater.
[40 C.F.R. § 60.252(a); 45CSR16; 45CSR§§5-3.1 & 4.1.a; 45CSR13, R13-0718, 4.1.15] [037C]

4.1.11. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.
[45CSR§5-3.4; 45CSR13, R13-0718, 4.1.9.] [001A, 001B, 003, 005, 007, 007A, 008, 010, 012, 012A, 013, 015, 016, 018, 046, 020, 022, 024, 033, 034, 036, 038, 047, 048, 050, 055, 056, CB18, CB18A, CB19, CB20, CR1 & TLB]
Note: Compliance with section 4.1.9 shall show compliance with this section for emission units CB18, CB18A, TLB, 022, 024.

4.1.12. In order to prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by the following:
[45CSR§5-7.1.] [Refuse Disposal Area]

(a) Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse.
[45CSR§5-7.2.] [Refuse Disposal Area]

(b) Coal refuse disposal areas shall not be so located with respect to mine openings, tipples, or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas.
[45CSR§5-7.3.] [Refuse Disposal Area]

(c) Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site.
[45CSR§5-7.4.] [Refuse Disposal Area]

(d) Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution.
[45CSR§5-7.5.] [Refuse Disposal Area]

(e) Materials with low ignition points used in the production or preparation of coal, including but not limited to wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area.
[45CSR§5-7.6.] [Refuse Disposal Area]

(f) Garbage, trash, household refuse, and like materials shall not be deposited on or near any coal refuse disposal area.
[45CSR§5-7.7.] [Refuse Disposal Area]

(g) The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.
[45CSR§5-7.8.] [Refuse Disposal Area]

(h) Each burning coal refuse disposal area which allegedly causes air pollution shall be investigated by the Director (in accordance with the following)
[45CSR§5-8.1.] [Refuse Disposal Area]

(i) Each coal refuse disposal area which causes air pollution shall be considered on an individual basis by the Director. Consistent with the declaration of policy and purpose set forth in section one of Chapter twenty-two, article five of the code of West Virginia, as amended, as well as the established facts and circumstances of the particular case, the Director shall determine and may order after a proper hearing

the effectuation of those air pollution control measures which are adequate for each such coal refuse disposal area.
[45CSR§5-8.2.] [Refuse Disposal Area]

(j) With respect to all burning coal refuse disposal areas, the person responsible for such coal refuse disposal areas or the land on which such coal refuse disposal areas are located shall use due diligence to control air pollution from such coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in section one of chapter twenty-two, article five of the code of West Virginia, as amended, the Director shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the Director establishes that air pollution exists or may be created, the person responsible for such coal refuse disposal area or the land on which such coal refuse disposal area is located shall submit to the Director a report setting forth satisfactory methods and procedures to eliminate, prevent, or reduce such air pollution. The report shall be submitted within such time as the Director shall specify. The report for the elimination, prevention or reduction of air pollution shall contain sufficient information, including completion dates, to establish that such program can be executed with due diligence. If approved by the Director, the corrective measures and completion dates shall be embodied in a consent order issued pursuant to W.Va. Code §§ 22-5-1 et seq. If such report is not submitted as requested or if the Director determines that the methods and procedures set forth in such report are not adequate to reasonably control such air pollution, then a hearing will be held pursuant to the procedures established by W.Va. Code § 22-5.
[45CSR§5-8.3.] [Refuse Disposal Area]

4.1.13. No person shall circumvent 40 C.F.R § 60.252 or 45CSR5 by adding additional gas to any dryer exhaust or group of dryer exhausts for the purpose of reducing the grain loading.
[45CSR§5-4.2.] [037C]

4.1.14. No person shall cause, suffer, allow or permit the exhaust gases from a thermal dryer to be vented into the open air at an altitude of less than eighty (80) feet above the foundation grade of the structure containing the dryer or less than ten (10) feet above the top of said structure or any adjacent structure, whichever is greater. In determining the desirable height of a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate and good engineering practice as set forth in 45CSR20. **[45CSR§5-4.3.] [037C]**

4.1.15. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 C.F.R § 60.11(d); 45CSR16; 45CSR13, R13-0718, 4.1.13 and 4.1.14] [001B, 001A, 003, 005, 007, 007A, 008, 010, 013, 022, 024, 033, 034, 036, 037C, 038, 047, 055, 056, 058, CB18, CB18A, CB19, CB20, CR1, TLB]

4.1.16. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in subdivisions of 45CSR§10-4.1.
[45CSR§10-4.1.] [037C]
Note: Compliance with SO_2 limit in Section 4.1.4 shall show compliance with this section.

4.1.17. No owner or operator subject to the provisions of this rule shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.] [037C]

4.1.18. Compliance with all annual throughput limits shall be determined using a 12 month rolling total. For example, a 12 month rolling total shall mean the sum of raw coal received at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-0718, 4.1.1]

4.2. Monitoring Requirements

4.2.1. a. The Permittee shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

1. A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±3° Fahrenheit. During normal operations, the temperature of the gas stream at the exit of the thermal dryer is maintained between 120 and 220 °F. A temperature outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the thermal dryer and corrective action shall be taken to return the temperature to an operating range of less than 220 °F and greater than 120 °F.

2. A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge. During normal operations, the pressure loss through the venturi constriction of the scrubber is maintained between 26 and 40 inches of H_2O. A pressure loss outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the venturi scrubber and corrective action shall be taken to return the pressure loss to an operating range of greater than 26 inches of H_2O and less than 40 inches of H_2O.

3. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. During normal operations, the water pressure to the scrubber is maintained between 14 and 30 psi. A water pressure outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the venturi scrubber and corrective action shall be taken to return the water pressure to an operating range of greater than 14 psi and less than 30 psi.

4. A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate. During normal operations, the water supply flow rate to the scrubber is maintained between 640 and 1053 GPM. Supply flow rate outside of this range shall be defined as an excursion. When an excursion occurs, the permittee shall conduct an inspection of the venturi scrubber and corrective action shall be taken to return the water supply flow rate to an operating range of greater than 640GPM and less than 1053 GPM.

b. All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under 40 C.F.R § 60.13(b)

[40 C.F.R § 60.256(a); 45CSR16; 40 C.F.R. §§64.6(c), 64.7(c) and 64.7(d)] [037C]

4.2.2. For the purpose of determining compliance with the opacity limits of Sections 4.1.8, 4.1.10 and 4.1.11 of this permit, the permittee shall conduct visible emissions checks and/or opacity monitoring for all emissions units subject to an opacity standard [Except for the following: stockpiles 029 (Clean/Raw Coal Stockpile 1) , 039 (Raw Coal Stockpile 1) and 042 (Raw Coal Stockpile 2) which are exempt; or new equipment Conveyor Belt CB18, Conveyor Belt CB18A and Truck Loadout Bin TLB and modified equipment Belt Conveyor CB10 (022) and Refuse Loadout Bin 1 (024), which are subject to the certification of compliance requirements in 40 CFR§60.255(b) found in Section 4.3.5. of this permit]:

a. An initial visible emissions evaluation in accordance with 40 CFR 60 Appendix A-4, Method 9 shall be performed within ninety (90) days of permit issuance for each emission unit with a visible emissions requirement in this permit unless such evaluation was performed within the consecutive 12-month period preceding permit issuance. This initial evaluation shall consist of three 6-minute averages during one consecutive 60 minute period. The initial evaluation shall be conducted at each emissions unit during the period of maximum expected visible emissions under normal unit and facility operations.

b. Each emissions unit with a visible emissions limit contained in this permit shall be observed visually at least once each calendar week during periods of facility operation for a sufficient time interval to determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR Part 60, Appendix A-7, Method 22 or from the lecture portion of the 40 CFR Part 60, Appendix A-4, Method 9 certification course.

   If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 CFR 60 Appendix A-4, Method 9 shall be conducted as soon as practicable, but no later than seventy-two (72) hours from the time of the observation. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as possible, but no later than twenty-four (24) hours from the time of the observation; the emissions unit is operating at normal operating conditions; and, the dates and times, causes and corrective measures taken are recorded.

c. If any visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation in accordance with 40 CFR 60 Appendix A-4, Method 9 shall be performed for that unit at least once every consecutive 14-day period. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements in Section 4.2.2.b. of this permit in lieu of those established in this condition.

d. A visual emissions evaluation shall be conducted on all process and control equipment at least once each calender month. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

e. A visible emissions evaluation shall be conducted for each emission unit at least once every consecutive 12-month period in accordance with 40 CFR 60 Appendix A-4, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for each emission unit.

f. A record of each visible emissions observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.

[40 C.F.R § 60.11(b); 45CSR16; 45CSR13, R13-0718, 4.2.4. and 4.3.1] [001B, 001A, 003, 005, 007, 007A, 008, 010, 012, 012A, 013, 015, 016, 018, 020, 033, 034, 036, 037C, 038, 046, 047, 050, 055, 056, 058, CB19, CB20, CR1]

4.2.3. The permittee shall inspect all fugitive dust control systems weekly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance. Records shall be maintained on site stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

4.2.4. The permittee shall use Method 5 or an alternative method approved by the Director for testing particulate matter emissions in condition 4.1.4. Parameter indicator ranges shall be established for the exit temperature of the thermal dryer, water pressure to the control equipment, and the pressure loss of the inlet airflow to the scrubber. The permittee shall establish these indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The permittee shall also record the following parameters during such testing:

a. Opacity readings on the exhaust stack following the procedures of Method 9;
b. Amount of coal burned and the amount of coal dried;
c. Coal drying temperature and residence time in the dryer;
d. Temperature of the gas stream at the exit of the thermal dryer;
e. Flow rate through the dryer and converted to dry standard cubic feet;
f. Water pressure to the control equipment; and
g. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

These records shall be maintained on site.

Note: In the last stack testing performed on 8-29-2012, PM emission rate was 95.2% of particulate loading limit in Section 4.1.4. Hence the next stack testing for PM has to be performed on or before 8-29-2013.

Subsequent testing to determine compliance with the particulate loading limitations of 4.1.10 and 4.1.4 shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % of particulate loading limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥90% of particulate loading limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of particulate loading limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥90% of particulate loading limit	Annual

[45CSR§30-5.1.c.] [037C]
Any stack venting thermal dryer exhaust gases shall include straight runs of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. Flow straightening devices shall be required where cyclonic gas flow would exist in the absence of such devices.
[45CSR§5-12.6.] [037C]

4.2.5. The permittee shall conduct monitoring/recordkeeping/reporting for the thermal dryer as follows:

a. A visible emissions evaluation shall be conducted for the thermal dryer unit(s) at least once every consecutive 12-month period in accordance with 40 C.F.R. 60 Appendix A, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for the thermal dryer unit(s).

b. The thermal dryer unit(s) included in this permit shall be observed visually on a daily basis during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions from the thermal dryer unit(s) are observed during these daily observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the thermal dryer unit(s), visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than fourteen (14) days from the time of the observation. A Method 9 evaluation shall not be required if the visible emissions condition is corrected in a timely manner; the thermal dryer unit(s) is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

c. If any subsequent visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a thermal dryer unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive seven (7) day period in accordance with 40 C.F.R. 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the thermal dryer unit for 3 consecutive evaluation periods, the thermal dryer may comply with the visible emissions testing requirements of Condition 4.2.5.b. in lieu of those established in this condition.

d. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site stating any maintenance or corrective actions taken as a result of the daily inspections. If any visible emissions evaluation performed in accordance with 40C.F.R.60 Appendix A, Method 9 indicates a visible emissions observation of twenty percent (20%) or greater, the minimum total time of the observations for that emission unit shall be sixty (60) minutes. This section shall not apply if any visible emissions observation is sixty percent (60%) or greater.

e. The thermal dryer unit(s) included in this permit shall be observed visually during periods of building a fire of operating quality and minimization efforts shall be taken to ensure particulate matter emissions of sixty percent (60 %) opacity for a period of up to 8 minutes in any operating day is not exceeded during such activities.

[45CSR§30-5.1.c] [037C]

4.2.6. The continuous emissions monitoring system on the thermal dryer exhaust stack shall measure sulfur dioxide concentrations which meets performance specifications set forth under Title 40, Part 60, Appendix B Performance Specification 2 – Specifications and Test Procedures for SO2 and NOx Continuous Emission Monitoring Systems in stationary sources of the Code of Federal Regulations. In addition, the Permittee shall conduct required reference method testing and calibration drift tests, including submission of certified quarterly reports showing conformance with the aforementioned Performance Specifications no later than sixty (60) days following installation of such CEM system and commencing operations of the subject thermal dryer. Such system shall also include a device which monitors stack gas flow rate and a data reduction system to convert stack gas concentrations into lbm/hr values and to provide cumulative monthly emission rates in tons. The output from the CEM system shall be used to vary the caustic addition rate of the sulfur dioxide removal system so that sulfur dioxide emissions shall be controlled below the limitations contained in Condition 4.1.4.
[45CSR§30-5.1.c] [037C]

The installation, operation and maintenance of a continuous monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 2 (PS2) shall be deemed to fulfill the requirements of a monitoring plan for a fuel burning unit(s), manufacturing process source(s) or combustion source(s).
[45CSR§10-8.2.c.1] [037C]

4.2.7. The permittee shall use EPA approved method or an alternative method approved by the Director for testing NOx, CO and VOC's to show compliance with Section 4.1.4. The permittee shall establish indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with NOx, CO and VOC limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken.
These records shall be maintained on site.
Subsequent testing to determine compliance with the NOx, CO and VOC limits of 4.1.4 shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Initial	≤50% of NOx, CO and VOC limits	Once/5 years
Initial	Between 50% and 90 % of NOx, CO and VOC limits	Once/3 years
Initial	≥90% of NOx, CO and VOC limits	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % of NOx, CO and VOC limits	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤50% of NOx, CO and VOC limits	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤50% of NOx, CO and VOC limits	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥90% of NOx, CO and VOC limits	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of NOx, CO and VOC limits	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥90% of NOx, CO and VOC limits	Annual

[45CSR§30-5.1.c.] [037C]

4.2.8. The owner or operator of a continuous emissions monitoring system installed pursuant to 45CSR10 shall follow the quality assurance requirements as set forth in 40 CFR Part 60, Appendix F. **[45CSR§10-8.2.c.1.A.] [037C]**

4.2.9. **Continuous Monitoring Requirements for Thermal Dryer.** The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the following monitoring requirements, as applicable to the affected facility:

a. The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

1. A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

2. For affected facilities that use wet scrubber emission control equipment:

i. A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

ii. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate

within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

b. All monitoring devices under this section are to be recalibrated annually in accordance with procedures under §60.13(b).

[40CFR§60.256(a); 45CSR16; 45CSR§5-9.1; 45CSR13, R13-0718, 4.2.5; 40 C.F.R. §64.6(c)] [037C]

4.2.10. The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the following monitoring, as applicable to the mechanical vent and any control device installed on the vent:

1. For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of 40CFR§60.256.

2. For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs a through d of this section.

   a. A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

   b. A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate.

   c. A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design pH.

   d. An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

3. For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

[40CFR§60.256(b); 45CSR16; 45CSR13, R13-0718, 4.2.6.]

4.2.11. Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the following requirements:

a. The bag leak detection system must meet the following specifications and requirements:

   1. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

2. The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

3. The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph a.4 of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

4. In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

5. Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph b.6 of this section.

6. Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph b of this section.

7. The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

8. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

b. The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the following items:

1. Installation of the bag leak detection system;

2. Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

3. Operation of the bag leak detection system, including quality assurance procedures;

4. How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

5. How the bag leak detection system output will be recorded and stored; and

6. Corrective action procedures as specified in paragraph c of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

c. For each bag leak detection system, the owner or operator must initiate procedures to determine the

cause of every alarm within 1 hour of the alarm. Except as provided in paragraph b.6 of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

1. Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

2. Sealing off defective bags or filter media;

3. Replacing defective bags or filter media or otherwise repairing the control device;

4. Sealing off a defective fabric filter compartment;

5. Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

6. Shutting down the process producing the PM emissions.

[40CFR§60.256(c); 45CSR16; 45CSR13, R13-0718, 4.2.7.]

4.2.12. (Note: The following section numbers match those of 40 C.F.R. §64.7)

(b) *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(d) *Response to excursions or exceedances.* (1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not

limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(e) *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40CFR§64.7] [037C]

4.2.13. (Note: The following section numbers match those of 40 C.F.R. §64.8)

§ 64.8 Quality improvement plan (QIP) requirements.

(a) Based on the results of a determination made under § 64.7(d)(2), the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with § 64.6(c)(3), the part 70 or 71 permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

(b) Elements of a QIP:

(1) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

(2) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.

(ii) Process operation changes.

(iii) Appropriate improvements to control methods.

(iv) Other steps appropriate to correct control performance.

(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (b)(2)(i) through (iv) of this section).

(c) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(d) Following implementation of a QIP, upon any subsequent determination pursuant to § 64.7(d)(2) the Administrator or the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(e) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40CFR§64.8] [037C]

4.3. Testing Requirements

4.3.1. The following test methods shall be utilized for Sections 4.2.4 and 4.2.7 unless otherwise approved by the Director:

a.	Carbon Monoxide	EPA Method 10
b.	Nitrogen Oxides	EPA Method 7
c.	Volatile Organic Compounds	EPA Method 25
d.	Particulate Matter	EPA Method 5

[45CSR§30-5.1.c] [037C]

4.3.2. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, the owner or operator of such facility shall conduct performance test(s) and furnish a written report of the results of such performance test(s).
[40CFR§60.8(a); 45CSR16; 45CSR13, R13-0718, 4.3.2.]

4.3.3. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
[40CFR§60.11(b); 45CSR16; 45CSR13, R13-0718, 4.3.3.]

4.3.4. **Performance Tests and Other Compliance Requirements for Subpart Y - Performance Tests.** An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct performance tests required by 40CFR§60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40CFR§60.257.
[40CFR§60.255(a); 45CSR16; 45CSR13, R13-0718, 4.3.4.]

4.3.5. **Performance Tests and Other Compliance Requirements for Subpart Y - Performance Tests.** An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008 [Belt Conveyors CB18, Belt Conveyor CB18A, Truck Loadout Bin TLB, Belt Conveyor CB10 (022) and Refuse Loadout Bin 1 (024)], must conduct performance tests according to the requirements of 40CFR§60.8 and the methods identified in 40CFR§60.257 to demonstrate compliance with the applicable emission standards in Subpart Y as specified in the following paragraphs:

a. For each affected facility subject to a PM, SO_2, or combined NO_X and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the following requirements, as applicable:

1. If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

2. If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

3. An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

b. For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the following requirements in, as applicable, except as provided for in paragraphs 40CFR§§60.255(e) and (f). Performance test and other compliance requirements for coal truck dump operations are specified in 40CFR§60.255(h).

1. Any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

2. If all 6-minute average opacity readings in the most recent performance are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

[40CFR§60.255(b); 45CSR16; 45CSR13, R13-0718, 4.3.5.]

4.3.6. **Performance Tests and Other Compliance Requirements for Subpart Y.** If any affected coal processing and conveying equipment (e.g., breakers, crushers, screens, conveying systems), coal storage systems, or other coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building do not exceed any of the standards in 40CFR§60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.
[40CFR§60.255(c); 45CSR16; 45CSR13, R13-0718, 4.3.6.]

4.3.7. An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements specified in Conditions 4.3.5.a.1 and 2 provided that the owner or operator meets all of the following conditions:

a. PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

b. The control device manufacturer's recommended maintenance procedures are followed, and

c. All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of 40 C.F.R. § 60.255 are followed.

This exemption does not apply to thermal dryers.

[40CFR§60.255(d); 45CSR16; 45CSR13, R13-0718, 4.3.7.]

4.3.8. For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the following conditions:

a. PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

b. The manufacturer's recommended maintenance procedures are followed for each control device; and

c. A performance test is conducted on each affected facility at least once every 5 calendar years.

[40CFR§60.255(e); 45CSR16; 45CSR13, R13-0718, 4.3.8.]

4.3.9. **Performance Tests and Other Compliance Requirements for Subpart Y - Monitoring Visible Emissions or Digital Opacity Compliance System.** As an alternative to meeting the requirements in condition 4.3.5, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the following requirements:

a. Monitor visible emissions from each affected facility according to the following requirements:

1. Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.

2. Conduct monthly visual observations of all processes and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

3. Conduct a performance test using Method 9 of Appendix A-4 of this part at least once every 5 calendar years for each affected facility.

b. Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administration or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector

Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator delegated authority shall be implemented by the owner or operator.

[40CFR§60.255(f); 45CSR16; 45CSR13, R13-0718, 4.3.9.]

4.3.10. **Performance Tests and Other Compliance Requirements for Subpart Y - COMS.** As an alternative to meeting the requirements in condition 4.3.5, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in 40CFR§§60.255(g)(1) and (2).
[40CFR§60.255(g); 45CSR16; 45CSR13, R13-0718, 4.3.10]

4.3.11. **Coal Truck Dump Operations.** The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the following requirements:

a. Conduct an initial performance test using Method 9 of Appendix A–4 of 40CFR60 according to the following requirements:

1. Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

2. Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

b. Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

c. Conduct a performance test using Method 9 of Appendix A–4 of 40CFR60 at least once every 5 calendar years for each affected facility.

[40CFR§60.255(h); 45CSR16; 45CSR13, R13-0718, 4.3.11]

4.3.12. **Test Methods and Procedures for Subpart Y.** The owner or operator must determine compliance with the applicable opacity standards as specified in the following paragraphs:

a. Method 9 of Appendix A-4 of 40CFR60 and the procedures in 40CFR§60.11 must be used to determine opacity, with the following exceptions:

1. The duration of the Method 9 of Appendix A-4 of this 40CFR60 performance test shall be 1 hour (ten 6-minute averages).

2. If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of 40CFR60 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

b. To determine opacity for fugitive coal dust emissions sources, the following additional requirements must be used:

1. The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
2. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

3. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

c. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

1. No more than three emissions points may be read concurrently.

2. All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

3. If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[40CFR§60.257(a); 45CSR16; 45CSR13, R13-0718, 4.3.12]

4.3.13. **Test Methods and Procedures for Subpart Y.** The owner or operator must conduct all performance tests required by 40CFR§60.8 to demonstrate compliance with the applicable emissions standards specified in 40CFR§60.252 according to the requirements in 40CFR§60.8 using the applicable test methods and procedures in 40CFR§§60.257(b)(1) through (8).
[40CFR§60.257(b); 45CSR16; 45CSR13, R13-0718, 4.3.13]

4.4. Recordkeeping Requirements

4.4.1. The applicant shall maintain on-site records of hourly operation of the thermal dryer–utilizing the form identified as Appendix A, to the Director showing
(a) cumulative yearly hours of operation of the dryer
(b) cumulative monthly emission rates for SO_2, and
(c) identifying all hours in which an allowable SO_2 emission rate was exceeded.
[45CSR13, R13-0718, 4.2.1] [037C]

4.4.2. For the purpose of determining compliance with the maximum throughput limits set forth under Condition 4.1.5., the permittee shall maintain certified monthly and annual records of the amount of raw coal transferred to the preparation plant on conveyor belts CB3 and CB16 combined and the hours operated, utilizing the form identified as Appendix B.
[45CSR13, R13-0718, 4.2.2.]

4.4.3. For the purpose of determining compliance with water truck usage set forth in 4.1.6., the permittee shall monitor water truck activity and maintain certified daily records, utilizing the form identified as Appendix C. Such records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request. In addition, for the purposes of demonstrating compliance with Condition 4.1.6., the permittee shall maintain daily records indicating the use of any dust suppressants or other suitable dust

control measures applied at the facility, utilizing the form identified as Appendix C. Such records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.
[45CSR13, R13-0718, 4.1.12 and 4.2.3.]

4.4.4. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-0718, 4.4.2.]

4.4.5. For all air pollution control equipment, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved;
b. Steps taken to minimize emissions during the event;
c. The duration of the event;
d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction;
f. Steps taken to correct the malfunction;
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-0718, 4.4.3.]

4.4.6. The permittee shall maintain records of all monitoring data required by Section 4.2.2 of this permit by documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix D. Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13, R13-0718, 4.4.4.]

4.4.7. Any and all records, such as throughput, hours of operation of the thermal dryer, SO_2 data, etc., shall be completed, certified and kept on site for a period of no less than five (5) years. Such records shall be made available to the Director or his or her duly authorized representative upon request.
[45CSR13, R13-0718, 4.1.2.]

4.4.8. The temperature of the gas stream at the exit of the thermal dryer shall be continuously recorded on a chart recorder. Records shall be maintained in accordance with 3.4.1. In addition to records of the gas stream temperature, the permittee shall document and maintain records of all periods when the temperature falls outside the range specified in 4.2.1.a.1 and any corrective actions taken during these periods. Maintenance and malfunction records for the thermal dryer and venturi scrubber shall be maintained in accordance with 4.4.4 and 4.4.5.
[037C] [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.9. The pressure loss through the venturi constriction of the scrubber shall be continuously recorded on a chart recorder. Records shall be maintained in accordance with 3.4.1. In addition to records of the pressure loss, the permittee shall document and maintain records of all periods when the pressure loss through the venturi constriction of the scrubber falls outside the range specified in 4.2.1.a.2 and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.4 and 4.4.5.
[037C] [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.10. The water supply pressure to the scrubber shall be continuously recorded on a chart recorder. Records shall be maintained in accordance with 3.4.1. In addition to records of the water supply pressure to the scrubber, the permittee shall document and maintain records of all periods when the water supply pressure falls outside the range specified in 4.2.1.a.3 and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.4 and 4.4.5.
[037C] [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.11. The water flow rate to the scrubber shall be continuously recorded on a chart recorder. Records shall be maintained in accordance with 3.4.1. In addition to records of the water flow rate to the scrubber, the permittee shall document and maintain records of all periods when the water flow rate falls outside the range specified in 4.2.1.a.4 and any corrective actions taken during these periods. Maintenance and malfunction records for the venturi scrubber shall be maintained in accordance with 4.4.4 and 4.4.5.
[037C] [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.12. For Compliance Assurance Monitoring (CAM), the owner or operator shall comply with the recordkeeping requirements of permit conditions 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance, or corrective actions).
[037C] [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.5. Reporting Requirements

4.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-0718, 4.5.1.]

4.5.2. 45CSR§10A-7.2. Exception Reporting.

7.2.a. CEMS. -- Each owner or operator employing CEMS for an approved monitoring plan, shall submit a "CEMS Summary Report" and/or a "CEMS Excursion and Monitoring System Performance Report" to the Secretary quarterly; the Secretary may, on a case-by-case basis, require more frequent reporting if the Secretary deems it necessary to accurately assess the compliance status of the source. All reports shall be postmarked no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A unless otherwise specified by the Secretary.

7.2.a.1. Submittal of 40 CFR Part 75 data in electronic data reporting (EDR) format to the Secretary shall be deemed to satisfy the requirements of subdivision 7.2.a.

7.2.a.2. If the total duration of excursions for the reporting period is less than four percent (4%) of the total source operating time for the reporting period and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the reporting period, only the CEMS Summary Report shall be submitted; the CEMS Excursion and Monitoring System Performance report shall be maintained on-site and shall be submitted to the Secretary upon request.

7.2.a.3. If the total duration of excursions for the reporting period is four percent (4%) or greater of the total operating time for the reporting period or the total monitoring method downtime for the reporting period is five percent (5%) or greater of the total operating time for the reporting period, the CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report shall both be submitted to the Secretary.

7.2.a.4. The CEMS Excursion and Monitoring System Performance Report shall be in a format approved by the Secretary and shall include the following information:

7.2.a.4.A. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion;

7.2.a.4.B. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility;

7.2.a.4.C. The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted;

7.2.a.4.D. The date and time identifying each period during which quality- controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system; and

7.2.a.4.E. When no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report.

[037C] [45CSR§10A-7.2]

4.5.3. Any violation(s) of the allowable SO_2 requirements in Section 4.1.2 of this permit and recorded in Appendix A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the testing, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-0718, 4.5.2.]

4.5.4. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality and US EPA (refer to section 3.5.3 for address) a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director and the Associate Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director and the Associate Director no more than sixty (60) days after the date the testing takes place.
[45CSR13, R13-0718, 4.5.3.]

4.5.5. **Notification and Record Keeping.** Any owner or operator subject to the provisions of this part shall furnish written notification as follows:

1. A notification of the date construction (or reconstruction as defined under 40CFR§60.15) of an affected facility is commenced postmarked no later than 30 days after such date.

2. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[40CFR§60.7(a); 45CSR16; 45CSR13, R13-0718, 4.5.4.]

4.5.6. The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

a. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

b. The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

c. The amount and type of coal processed each calendar month.

d. The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

e. Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

f. Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, e.g. objections, to the plan and any actions relative to the alternative control measures, e.g. approvals, shall be noted in the logbook as well.

g. For each bag leak detection system, the owner or operator must keep the records specified in paragraphs g.1 through 3 of this section.

1. Records of the bag leak detection system output;

2. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

3. The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

h. A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

i. During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

j. During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

[40CFR§60.258(a); 45CSR16; 45CSR13, R13-0718, 4.5.5.]

4.5.7. For the purpose of reports required under section 40CFR§60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

a. The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

b. The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

c. All 6-minute average opacities that exceed the applicable standard.

[40CFR§60.258(b); 45CSR16; 45CSR13, R13-0718, 4.5.6.]

4.5.8. **Reporting for Subpart Y - Results of Initial Performance Tests.** The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of 40CFR§60.8. The owner or operator who elects to comply with the reduced performance testing provisions of 40CFR§§60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with 40CFR§60.255(d) shall also include information which demonstrates that the control devices are identical. **[40CFR§60.258(c); 45CSR16; 45CSR13, R13-0718, 4.5.7.]**

4.5.9. **Reporting for Subpart Y - WebFIRE Data Base.** After July 11, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test date to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at:

http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main

For performance tests that cannot be entered into WebFIRE (i.e. Method 9 of appendix A-4 of 40CFR60 opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code D243-01; RTP, NC 27711.

[40CFR§60.258(d); 45CSR16; 45CSR13, R13-0718, 4.5.8.]

4.5.10. For CAM, monitoring reports shall be submitted to the director and at a minimum shall include and be in accordance with information in permit conditions 3.5.6 and 3.5.8, as applicable. Also, at a minimum, the following information, as applicable, shall be included:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[037C] [40 C.F.R. §64.9(a); 45CSR§30-5.1.c]

4.6. Compliance Plan

4.6.1. N/A

APPENDIX A
Monthly Report of Thermal Dryer Emissions
Consolidation Coal Company
Blacksville No. 2 Preparation Plant
Company ID No. 061-00016

1. Hours of operation:

2. Cumulative emissions of SO_2 in tons (current month):

3. Cumulative emissions of SO_2 in tons (current year):

4. Hours exceeding SO_2 emission rate (maximum hourly average):

5. Dryer fuel in tons:

6. Dryer fuel sulfur (%, as rec'd):

Appendix B[1]
Daily Throughput of Coal on Conveyors CB3 and CB16 combined to the Preparation Plant
Consolidation Coal Company
Blacksville No. 2 Preparation Plant
Company ID No. 061-00016

Month Year

Day of Month	Throughput (Tons)	Hours Operated	Average Hourly Throughput (Tons/Hour)	Initials
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
Monthly Throughput				
12 Month Rolling Total				
Yearly Permitted Limit	10,000,000 TPY			

Note: (1) The **CERTIFICATION OF DATA ACCURACY** statement appearing on the reverse side shall be completed and kept on site for a period of no less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.

Appendix C [1]
Certified Daily and Monthly Water Usage By The Pressurized Water Truck
Consolidation Coal Company
Blacksville No. 2 Preparation Plant
Company ID No. 061-00016

Month _____ Year

Day of Month	Water Truck Used (Y/N)	Quantity of Water Applied[2] (gallons)	Name and Amount of Chemical Suppressants Added (gallons)	Comments[3]	Initials
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Notes: (1) The **CERTIFICATION OF DATA ACCURACY** statement appearing on the reverse side shall be completed and kept on site for a period of no less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.

(2) The quantity of water used may be estimated based on the volume of the tank and the number of times the water truck was refilled.

(3) Use the comment section to explain why the water truck was not in use or was used sparingly.

APPENDIX D – Weekly Opacity Record

Consolidation Coal Company

Blacksville No. 2 Preparation Plant

Company ID No. 061-00016

Date of Observation:

Data Entered by:

Reviewed by:

Date Reviewed:

Describe the General Weather Conditions:

Stack ID/Vent ID/ Emission Point ID	Stack/Vent/Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Weeks of Visual Emissions	Comments

45CSR10A

Appendix E - CEMS Summary Report

Pollutant SO_2

Company _____

_____

Emission Limitation

Regulation	Limit	Units	Period
45 CSR 10			

Reporting Period: Calendar Quarter _____ to _____

Monitor Manufacturer: _____

Model Number: _____

Date of Last Certification or Audit: _____

Process Unit(s) Description: _____

_____

_____

Emissions Data Summary

1. Duration of excess emissions in reporting period due to:

a. Startup/Shutdown _____ hours

b. Malfunctions due to Control Equipment Problems _____ hours

c. Malfunctions due to Process Problems _____ hours

d. Other Known Causes _____ hours

e. Unknown Causes _____ hours

2. Total Duration _____ hours

3. Percent Excess Emissions _____ %

CEMS Performance Summary

1. CEMS Downtime in reporting period due to:

a. Monitor Equipment Malfunction _____ hours

b. Other Equipment Malfunction _____ hours

c. Quality Assurance Calibration _____ hours

d. Other Known Causes _____ hours

e. Unknown Causes _____ hours

2. Total CEMS Downtime _____ hours

3. Percent CEMS Downtime _____ %

% Downtime = 100 8 (Total COMS Downtime / Total Source Operating Time)

Please Note:
1. Separate Summary Reports are required for each process in the system when it has separate monitoring equipment.
2. Total source operating time means the total time which the affected source is operating, including all periods of start-up, shut-down, malfunction, or CEMS downtime as those times are defined under the rule.
3. All times for SO_2 emissions are to be reported in hours.
4. On a separate page describe any changes since the last reporting period to the CEMS process or controls.
5. Other reports may be necessary to meet requirements.

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Kepler Processing Plant

54-109-00013

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West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Kepler Processing Company, LLC
Pocahontas No. 51 Preparation Plant
R30-10900013-2018

William F. Durham
Director

Issued: January 3, 2018 • Effective: January 17, 2018
Expiration: January 3, 2023 • Renewal Application Due: July 3, 2022

Permit Number: **R30-10900013-2018**
Permittee: **Kepler Processing Company, LLC**
Facility Name: **Pocahontas No. 51 Preparation Plant**
Permittee Mailing Address: **P.O. Box 1392, Pineville, WV 24874**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Pineville, Wyoming County, West Virginia
Facility Mailing Address:	Same as above
Telephone Number:	(304) 732-6452
Type of Business Entity:	LLC
Facility Description:	The Pocahontas No. 51 Preparation Plant is a coal preparation plant with thermal dryer. It has the ability to screen, break/size, wash, thermally dry, store, and load out/in coal. The maximum capacity of the preparation plant is 1,000 tons per hour of raw coal feed.
SIC Codes:	Primary 1221; Secondary NA; Tertiary NA
UTM Coordinates:	449.67 km Easting • 4158.67 km Northing • Zone 17

Permit Writer: Frederick Tipane

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits 3

2.0 General Conditions 6

3.0 Facility-Wide Requirements 15

Source-specific Requirements

4.0 Crushing, Screening, Storage and Conveying 23

5.0 Thermal Dryer 36

APPENDICES (Appendix A, Appendix B, Appendix C and Appendix D from Permit R13-2104)

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device[1]
CRUSHING AND SCREENING					
SC1	T5, T6, & T7	Vibrating Raw Coal Screen	2013	1000 TPH	FE
SC2	T15, T16, & T17	Raw Coal Screen	2010	700 TPH	FE, WS
RB1	T6, T8, & T20A	Rotary Breaker	1968	600 TPH	FE
STORAGE (Piles)					
OS1	T38 & T39	Raw Coal Stockpile	1982	100,000 Ft^2/ 20,000 Tons	MC
OS2	T35, T37, T13 & T14	Raw/Clean Coal Stockpile	1996	100,000 Ft^2/ 30,000 Tons	MC
OS3	T22	Emergency Refuse Stockpile	1996	200 Ft^2/400 Tons	MC
OS4	T47 & T48	Lime Stockpile	1999	500 Ft^2/50 Tons	MC
OS5	T18 & T53	Refuse Stockpile	2010	2,544 Ft^2/500 Tons	MC
STORAGE (Bins and Hoppers)					
B1	T33 & T34	Train Loadout Bin	1997	450 Tons	FE
B2	T26 & T27	Refuse Bin No. 1	2013	200 Tons	FE
B3	T1 & T3	Truck Dump Hopper	2013	50 Tons	PE
B4	T2 & T4	Truck Dump Hopper	2013	50 Tons	PE
B5	T40, T41 & T46	Refuse Bin No. 2	2013	200 Tons	FE
B6	T10 & T11	Raw Coal Silo	2013	5,000 Tons	FE
B7	T22, T23 & T44	Plant Refuse Bin	2013	175 Tons	FE
B8	T48 & T49	Lime Bin	1999	25 Tons	PE

[1]Transfer points (TP) have the same type of fugitive dust control system as the associated conveyors unless otherwise noted. Fugitive Dust Control System/Control Device abbreviations: FE = Full Enclosure, FE/FE = Full Enclosure in Building, PE = Partial Enclosure, ST = Stacking Tube, MC = Moisture Content, UC = Underground reclaim feeder, TC = Telescoping Chute, EM = Enclosure and evacuation to mechanical collector, ES = Enclosure and evacuation to a scrubber, NE = No Equipment, RWMW = Water Truck with Manufactured pressurized sprays, WS = Water Spray, WSS = Flooded Disc Scrubber, MCS = Multiclone System, ME = Mist Eliminator.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device[1]
THERMAL DRYER					
TD1	001, T30, T31 & T32	Thermal Dryer	1968	130MMBtu/Hr *Actual Maximum* – 105 MMBtu/Hr	Multi-Clone, Wet Scrubber, Mist Eliminator
HAULROADS					
UPR1	T1, T2, T37, T38 & T39	Raw/Clean Coal Truck Traffic	NA	0.5 Mile per trip	WS
UPR2	T27	Refuse Truck Traffic	2013*	0.5 Mile per trip	WS
UPR3	T41	Refuse Truck Traffic	2013*	1 Mile per trip	WS
UPR4	T13, T39, T48 & T51	Endloader/Dozer Traffic	NA	1 Mile per trip	WS
UPR5	T47	Lime Truck Traffic	NA	0.5 Mile per trip	WS
UPR6	T53	RefuseTruck Traffic	2010	0.5 Mile per trip	WS
PVD1	T47	Lime Truck Traffic	1999	0.5 Mile per trip	WS
CONVEYORS					
C-1	T3, T4, & T5	Truck Dump Conveyor to SC1	2013	1000 TPH	PE
C-2	T21, T45 & T22	Refuse Conveyor to OS3 or B7	2013	600 TPH	PE
C-3	T6 & T43	Raw Coal Conveyor to C-17	1996	500 TPH	PE
C-4	T6, T7, T8 & T9	Raw Coal Conveyor to C-5	2013	1000 TPH	PE
C-5	T9 & T10	Raw Coal Conveyor to B6	2013	1000 TPH	PE
C-6	T11 & T12	Silo Recovery Conveyor	1997	1,000 TPH	PE
C-7	T14 & T15	Raw Coal Conveyor to SC2 or C-8	1976	700 TPH	MC/PE
C-8	T15 & T36A	Clean Coal Recycle Conveyor	1996	700 TPH	PE
C-9	T17, T12 & T19	Raw Coal Conveyor to Wet Wash	1997	1,000 TPH	PE
C-10	T44 & T26	Refuse Conveyor to C23 or C-22	2013	600 TPH	PE
C-12	T29 & T30	Clean Coal to Thermal Dryer	1968	550 TPH	PE
C-13A	T28, T30, T31, T36 T32 & T36A	Clean Coal Conveyor to C-13B	1997	700 TPH	PE
C-13B	T36 & T33	Clean Coal Conveyor to B1 or C-14	1997	700 TPH	PE

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device[1]
C-14	T33 & T35	Clean Coal Conveyor to OS2	1996	700 TPH	PE
C-15	T26 & T40	Refuse Conveyor to B5	2013	600 TPH	PE
C-17	T43, T20A, T50 & T21	Refuse Conveyor to C-2	2013	600 TPH	PE
C-18	T52 & T45	Refuse Conveyor to C-2	2013	600 TPH	PE
C-19	T49 & T50	Lime Conveyor	1999	25 TPH	PE
C-21	T16 & T18	Refuse Conveyor to OS5	2010	700 TPH	PE
C-22	T26 & T54	Refuse Conveyor to B2 or C-15	2013	600 TPH	PE
C-23	T54 & T55	Refuse Conveyor to the Refuse Embankment	2013	600 TPH	PE
Retired "In-place" Equipment					
NA	NA	Crusher (by-passed since 2005)	1968	NA	FE

* In 2013, the company limited one refuse truck to be operating on UPR2 and UPR3 at a time and increased the maximum hourly throughput from 500 TPH to 600 TPH

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2104G	March 17, 2014

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible évidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding. **[45CSR§30-5.3.e.3.B. and 45CSR38]**

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect. **[45CSR§30-5.1.e.]**

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14), 45CSR13 - Permit R13-2104-§3.5.5.]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. Water spray systems for the purpose of fugitive particulate dust control shall be designed, installed, operated, and maintained so as to minimize the generation of fugitive particulate emissions from the wind erosion of stockpiles and material transfer points.

The permittee shall maintain pressurized water spray bars on site and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used. The spray bar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated. The pump delivering the water, or solution, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.

A properly designed, installed, and maintained winterization system on each of the water spray systems shall be in place so to functionally maintain all fugitive particulate dust control during periods when ambient temperature falls to or below 32 degrees Fahrenheit.
[45CSR13 - Permit R13-2104-§4.1.3.]

3.1.10. The permittee shall maintain a water truck on site at the facility and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haul roads, stockpiles and other work areas where mobile equipment is used.
[45CSR13 - Permit R13-2104-§4.1.4.]

3.1.11. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2104, R13-2104A, R13-2104B, R13-2104C, R13-2104D, R13-2104F and R13-2104G and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13 - Permit R13-2104-§2.5.1.]

3.1.12. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-6.1.]

3.1.13. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment.
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-6.2.]

3.1.14. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, authorized by Permit R13-2104, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.
[45CSR13 - Permit R13-2104-§2.1.14.]

3.1.15. No person shall construct, modify or relocate any coal preparation plant or coal handling operation without first obtaining a permit in accordance with the provisions of W. Va. Code §22-5-1 et seq. and the Director's rules for review and permitting of new or modified sources.
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-10.1.]

3.1.16. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13 - Permit R13-2104-§4.1.11.]

3.2. Monitoring Requirements

3.2.1. [*Reserved*]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test

methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) 45CSR13 and 45CSR10]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13 - Permit R13-2104-§4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records

and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.; 45CSR13 - Permit R13-2104-§3.4.1.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the

probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. 45CSR19 (Non-attainment NSR) - Not located in a non-attainment area or will not contribute to a violation of section.

b. 45CSR27 (Toxic air pollutants - BAT) – does not meet definition of chemical processing unit.

c. 45CSR28 (Emission Trading and Banking) - not involved in this program.

d. Section 112 (Hazardous Air Pollutants) - no MACT standard has been promulgated for thermal dryers.

e. Section 129 (Solid waste combustion) - facility does not combust solid waste.

f. Section 183(f) (Tank vessel standards) - no tanks/vessels utilized at this facility.

g. Section 183 (e) - facility is not a regulated entity as defined by Section 183 (e)(C).

h. NAAQS increments or visibility (temp. sources) – facility has no temporary sources.

i. Federal Implementation Plan (FIP) - none in place

j. Title IV of the CAA (Acid Rain) - not an EGU.

4.0 Crushing, Screening, Storage and Conveying [emission point ID(s): *SC1, SC2, RB1, OS1-OS5, B1-B8, C1-C23*]

4.1. Limitations and Standards

4.1.1. The permittee shall not exceed the maximum hourly and annual throughput rates and other criteria outlined in the table below and in the table in Section 1.0 Emission Units (i.e., table in Section 1.0 Emission Units of Permit R13-2014).

Equipment ID No.	Maximum Capacity		Control Equipment*	Associated Transfer Points		
	TPH	TPY x 10^6		Location:	ID No.	Control Equipment*
OS1	700	4.3	MC	Before	T38	MC
				After	T39	MC
B3	1000	4.3	PE	Before	T1	MC
				After	T3	FE
B4	1000	4.3	PE	Before	T2	MC
				After	T4	FE
C-1	1000	4.3	PE	Before	T3/T4	FE,FE
				After	T5	FE/FE
SC1	1000	4.3	FE/FE	Before	T5	FE/FE
				After	T6	FE/FE
				After	T7	FE
RB1	600	4.3	FE	Before	T6	FE/FE
				After	T20A	FE
				After	T8	FE
C-4	1000	4.3	PE	Before	T6	FE/FE
				Before	T7	FE
				Before	T8	FE
				After	T9	FE
C-5	1000	4.3	PE	Before	T9	FE
				After	T10	PE
B6	1000	4.3	FE	Before	T10	PE
				After	T11	PE
C-21	700	0.005	PE	Before	T16	FE
				After	T18	MC
OS5	700	0.005	MC	Before	T18	MC
				After	T53	MC

Equipment ID No.	Maximum Capacity		Control Equipment*	Associated Transfer Points		
	TPH	TPY x 10^6		Location:	ID No.	Control Equipment*
C-9	1,000	4.3	PE	Before	T12	PE
				Before	T17	FE
				After	T19	FE/FE
OS2	700	4.3	MC	Before	T35	PE
				Before	T37	MC
				After	T13	MC
				After	T14	FE
C-14	700	3.01	PE	Before	T33	FE
				After	T35	PE
C-18	600	2.25	PE	Before	T52	FE
				After	T45	PE
C-19	25	0.219	PE	Before	T49	PE
				After	T50	FE
B8	25	0.219	PE	Before	T48	MC
				After	T49	PE
OS4	25	0.219	MC	Before	T47	MC
				After	T48	MC
C-10	600	2.25	PE	Before	T44	FE/FE
				After	T26	FE
C-23	600	2.25	PE	Before	T54	PE
				After	T55	PE
C-22	600	2.25	PE	Before	T54	PE
				After	T26	FE
B2	600	2.25	FE	Before	T26	FE
				After	T27	PE
C-12	550	3.01	PE	Before	T29	FE/FE
				After	T30	FE
C-13B	700	3.01	PE	Before	T36	PE
				After	T33	FE
B1	700	3.01	FE	Before	T33	FE
				After	T34	PE
C-7	700	4.3	PE	Before	T14	FE
				After	T15	PE

Equipment ID No.	Maximum Capacity		Control Equipment*	Associated Transfer Points		
	TPH	TPY x 10^6		Location:	ID No.	Control Equipment*
SC2	700	4.3	FE, WS	Before	T15	PE
				After	T16	FE
				After	T17	FE
C-6	1,000	4.3	PE	Before	T11	PE
				After	T12	PE
C-8	700	3.01	PE	Before	T15	PE
				After	T36A	PE
C-13A	700	3.01	PE	Before	T28	FE/FE
				Before	T30	FE
				Before	T31	FE
				Before	T32	FE
				Before	T36A	PE
				After	T36	PE
C-3	500	1.85	PE	Before	T6	FE/FE
				After	T43	FE
C-17	600	2.25	PE	Before	T43	FE
				Before	T20A	FE
				Before	T50	FE
				After	T21	PE
C-2	600	2.25	PE	Before	T21	PE
				Before	T45	PE
				After	T22	FE/FE
OS3	600	0.1	MC	Before	T22	MC
B7	600	2.25	FE	Before	T22	FE/FE
				Before	T23	FE
				After	T44	FE/FE
C-15	600	2.25	PE	Before	T26	FE
				After	T40	FE
B5	600	2.25	FE	Before	T40	FE
				After	T41	PE
				After	T46	MC

* FE - Full Enclosure, PE - Partial Enclosure, MC – Moisture Content, WS - Water Spray

[45CSR13 - Permit R13-2104-§4.1.1.]

4.1.2. Compliance with all annual throughput limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the amount of material received, processed, and/or shipped at any given time during the previous twelve (12) consecutive calendar months.
[45CSR13 - Permit R13-2104-§4.1.2.]

4.1.3. **Standards for Particulate Matter.** On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater. *[40 CFR 60 Subpart Y is applicable to storage bins and hoppers (B1, B8), and conveyors (C-3, C-6, C-7, C-8, C-9, C-13A, C-13B, C-14, C-19)].*
[45CSR13 - Permit R13-2104-§§4.1.9. & 4.1.13. 45CSR§5-3.4., 45CSR16 and 40 CFR §60.254(a)]

4.1.4. **Standards for Particulate Matter.** On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of 40 CFR §60.254(b). [S*creens SC1 and SC2, storage bins and hoppers B2, B3, B4, B5, B6, B7 and conveyors C-1, C-2, C-4, C-5, C-10, C-15, C-17, C-18, C-21, C-22 and C-23*] *Compliance with this streamlined limit will assure compliance with 45CSR§5-3.4*

a. Except as provided in paragraph (b)(3) of 40 CFR §60.254(b), the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.
[40CFR§60.254(b)(1)]

b. Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of 40 CFR §60.254(b).
[40CFR§60.254(b)(3)]

[45CSR13 - Permit R13-2104-§4.1.14., 45CSR16 and 40 CFR §60.254(b)]

4.1.5. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility [i.e. *Storage: (B1, B2, B3, B4, B5, B6, B7, B8), Screens: (SC1, SC2), Conveyors: (C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-13A, C-13B, C-14, C-15, C-17, C-18, C-19, C-21, C-22, C-23)*] including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[45CSR13 - Permit R13-2104-§4.1.12., 45CSR16, and 40 CFR §60.11(d)]

4.1.6. In order to prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by 45CSR§5-7.(conditions 4.1.7 through 4.1.13. below) (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.1.]

4.1.7. Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.2.]

4.1.8. Coal refuse disposal areas shall not be so located with respect to mine openings, tipples or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.3.]

4.1.9. Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.4.]

4.1.10. Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.5.]

4.1.11. Materials with low ignition points used in the production or preparation of coal, including, but not limited to, wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.6.]

4.1.12. Garbage, trash, household refuse and like materials shall not be deposited on or near any coal refuse disposal area. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.7.]

4.1.13. The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-7.8.]

4.1.14. With respect to all burning coal refuse disposal areas, the person responsible for the coal refuse disposal areas or the land on which the coal refuse disposal areas are located shall use due diligence to control air pollution from the coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, the Director shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the Director establishes that air pollution exists or may be created, the person responsible for the coal refuse disposal area or the land on which the coal refuse disposal area is located shall submit to the Director a report setting forth satisfactory methods and procedures to eliminate, prevent or reduce the air pollution. The report shall be submitted within such time as the Director shall specify. The report for the elimination, prevention or reduction of air pollution shall contain sufficient information, including, completion dates, to establish that the corrective measures can be executed with due diligence. If approved by the Director, the corrective measures and completion dates shall be embodied in a consent order issued pursuant to W. Va. Code §§ 22-5-1 et seq. If the report is not submitted as requested or if the Director determines that the methods and procedures set forth in the report are not adequate to reasonably control the air pollution he or she shall issue an order requiring the elimination, prevention or reduction of the air pollution. (*Refuse Stockpiles OS3 and OS5*)
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-8.3.]

4.2. Monitoring Requirements

4.2.1. [*Reserved*]

4.3. Testing Requirements

4.3.1. To determine compliance with the opacity limits of permit condition 4.1.3., the permittee shall conduct weekly visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for all coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems. These observations shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed.
[45CSR13 - Permit R13-2104-§4.2.1., 45CSR16, 40 CFR §60.257(a) & §60.11]

4.3.2. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by 40 CFR Part 60 and at such other times as may be required, the owner or operator of such facility shall conduct performance test(s) and furnish a written report of the results of such performance test(s).
[45CSR13 - Permit R13-2104-§4.3.1., 45CSR16, 40 CFR §60.8(a)]

4.3.3. Compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
[45CSR13 - Permit R13-2104-§4.3.2., 45CSR16, 40 CFR §60.11(b)]

4.3.4. **Performance Tests and Other Compliance Requirements for Subpart Y - Performance Tests.** An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR §60.257.
[45CSR13 - Permit R13-2104-§4.3.3., 45CSR16, 40 CFR §60.255(a)]

4.3.5. **Performance Tests and Other Compliance Requirements for Subpart Y - Performance Tests.** An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emission standards in Subpart Y as specified in paragraphs (b)(1) and (b)(2) of 40 CFR §60.255.

a. For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of 40 CFR §60.255, as applicable, except as provided for in paragraphs (e) and (f) of 40 CFR §60.255. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of 40 CFR §60.255.
[40 CFR §60.255(b)(2)]

1. If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.
[40 CFR §60.255(b)(2)(i)]

2. If all 6-minute average opacity readings in the most recent performance are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.
[40 CFR §60.255(b)(2)(ii)]

[45CSR13 - Permit R13-2104-§4.3.4., 45CSR16, 40 CFR §60.255(b)]

4.3.6. **Performance Tests and Other Compliance Requirements for Subpart Y - Monitoring Visible Emissions or Digital Opacity Compliance System.** As an alternative to meeting the requirements in paragraph (b)(2) of 40 CFR §60.255 *[see permit condition 4.3.5. above]*, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of 40 CFR §60.255.

a. Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of 40 CFR §60.255.
[40 CFR §60.255(f)(1)]

1. Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.
[40 CFR §60.255(f)(1)(i)]

2. Conduct monthly visual observations of all processes and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.
[40 CFR §60.255(f)(1)(ii)]

3. Conduct a performance test using Method 9 of Appendix A-4 of this part at least once every 5 calendar years for each affected facility.
[40 CFR §60.255(f)(1)(iii)]

b. Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administration or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector

Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator delegated authority shall be implemented by the owner or operator.
[40 CFR §60.255(f)(2)]

[45CSR13 - Permit R13-2104-§4.3.5., 45CSR16, 40 CFR §60.255(f)]

4.3.7. **Performance Tests and Other Compliance Requirements for Subpart Y - COMS.** As an alternative to meeting the requirements in paragraph (b)(2) of this section *[see permit condition 4.3.5. above]*, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of 40 CFR §60.255.
[45CSR13 - Permit R13-2104-§4.3.6., 45CSR16, 40 CFR §60.255(g)]

4.3.8. **Performance Tests and Other Compliance Requirements for Subpart Y - Truck Dump Operations.** The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, (i.e. Truck unloading to Hoppers "B3" and "B4") must meet the requirements specified in paragraphs (h)(1) through (3) of 40 CFR §60.255.

(Note: Paragraph (h)(1) requires initial testing that has already been performed. Therefore, it has been excluded from this permit requirement.)

a. Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.
[40CFR§60.255(h)(2)]

b. Conduct a performance test using Method 9 of appendix A-4 of 40 CFR Part60 at least once every 5 calendar years for each affected facility.
[40CFR§60.255(h)(3)]

[45CSR13 - Permit R13-2104-§4.3.7., 45CSR16, 40 CFR §§60.255(h)(2) and (h)(3)]

4.3.9. **Performance Tests and Other Compliance Requirements for Subpart Y.** If any affected coal processing and conveying equipment (e.g., breakers, crushers, screens, conveying systems), coal storage systems, or other coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and the emissions from the building do not exceed any of the standards in §60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.
[45CSR13 - Permit R13-2104-§4.3.8., 45CSR16, 40 CFR §60.255(c)]

4.3.10. **Test Methods and Procedures for Subpart Y.** The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of 40 CFR §60.257.

a. Method 9 of appendix A-4 of 40 CFR Part 60 and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in 40 CFR §60.257 paragraphs (a)(1)(i) and (ii).
[40 CFR §60.257(a)(1)]

1. The duration of the Method 9 of Appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).
[40 CFR §60.257(a)(1)(i)]

2. If, during the initial 30 minutes of the observation of a Method 9 of Appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.
[40 CFR §60.257(a)(1)(ii)]

b. To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in 40 CFR §60.257 paragraphs (a)(2)(i) through (iii) must be used.
[40 CFR §60.257(a)(2)]

1. The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
[40 CFR §60.257(a)(2)(i)]

2. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
[40 CFR §60.257(a)(2)(ii)]

3. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.
[40 CFR §60.257(a)(2)(iii)]

c. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in 40 CFR §60.257 paragraphs (a)(3)(i) through (iii) of this section are met.
[40 CFR §60.257(a)(3)]

1. No more than three emissions points may be read concurrently.
[40 CFR §60.257(a)(3)(i)]

2. All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
[40 CFR §60.257(a)(3)(ii)]

3. If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.
[40 CFR §60.257(a)(3)(iii)]

[45CSR13 - Permit R13-2104-§4.3.9., 45CSR16, 40 CFR §60.257(a)]

4.4. Recordkeeping Requirements

4.4.1. To demonstrate compliance with the operating limits set forth under Permit R13-2104, the permittee shall maintain daily throughput records using the sample record keeping format appended to Permit R13-2104 as Appendix A and B (see Appendix A and Appendix B of this permit). The permittee shall maintain daily throughput records of the amount of water applied through the fixed water spray system and by the water truck using the sample record keeping format appended to Permit R13-2104 as Appendix C (see Appendix C of this permit). These records shall be maintained on site for a period of not less than five (5) years and certified records shall be made available to the Director or a duly authorized representative of the Director upon request.
[45CSR13 - Permit R13-2104-§4.4.4]

4.4.2. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include the date and time of each visible emission check, the emission point or equipment / source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). An example form is supplied in Permit R13-2104 as Appendix D (see Appendix D of this permit). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the weekly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR13 - Permit R13-2104-§§4.2.1. and 4.4.5, 45CSR§30-5.1.c.]

4.4.3. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2104-§4.4.2.]

4.4.4. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2104-§4.4.3.]

4.4.5. The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

a. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.
[40 CFR §60.258(a)(1)]

b. The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.
[40 CFR §60.258(a)(2)]

c. The amount and type of coal processed each calendar month.
[40 CFR §60.258(a)(3)]

d. The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.
[40 CFR §60.258(a)(4)]

e. Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.
[40 CFR §60.258(a)(5)]

f. Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.
[40 CFR §60.258(a)(6)]

[45CSR16, 40 CFR §60.258(a)] [*Screens SC1 and SC2, Storage bins and hoppers B2, B3, B4, B5, B6, B7, Conveyors C-1, C-2, C-4, C-5, C-10, C-15, C-17, C-18,C-21, C-22 and C-23*]

4.5. Reporting Requirements

4.5.1. Upon observing any visible emissions in excess of twenty percent (20%) opacity under 4.3.1. above, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading.
[45CSR13 - Permit R13-2104-§4.2.1.]

4.5.2. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality and the Associate Director - Office of Enforcement and Permit Review (3AP12) of the U.S. EPA a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director and the Associate Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director and the Associate Director no more than sixty (60) days after the date the testing takes place.
[45CSR13 - Permit R13-2104-§4.5.1.]

4.5.3. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13 - Permit R13-2104-§4.5.2.]

4.5.4. Any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish written notification as follows:

a. A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date.
[40 CFR §60.7(a)(1)]

b. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
[40 CFR §60.7(a)(3)]

[45CSR13 - Permit R13-2104-§4.5.3., 45CSR16, 40 CFR §60.7(a)]

4.5.5. **Reporting for Subpart Y - Opacity Exceedances.** For the purposes of reports required under 40 CFR §60.7(c), any owner or operator subject to the provisions of Subpart Y also shall report semiannually periods of excess emissions as follow:

a. All 6-minute average opacities that exceed the applicable standard.
[40 CFR §60. 258(b)(3)]

[45CSR13 - Permit R13-2104-§4.5.4., 45CSR16, 40 CFR §60.258(b)]

4.5.6. **Reporting for Subpart Y - WebFIRE Data Base.**
After July 11, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test date to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main. For performance tests that cannot be entered into WebFIRE (i.e. Method 9 of appendix A-4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code D243-01; RTP, NC 27711.
[45CSR13 - Permit R13-2104-§4.5.6., 45CSR16, 40 CFR §60.258(d)]

4.6. Compliance Plan

4.6.1. None

5.0 Thermal Dryer [emission point ID: *TD1*]

**Note – "CAM" in this section shall mean Compliance Assurance Monitoring.*

5.1. Limitations and Standards

5.1.1. The maximum fuel feed rate to the thermal dryer shall not exceed 105 mmBtu per hour. To demonstrate compliance with this operating limit, the permittee shall continue to use a Riley #350 pulverizer which limits the dryer to 105 mmBtu/hr fuel feed rate.
[45CSR13 - Permit R13-2104-§4.1.8.]

Particulate Matter (PM) Requirements

5.1.2. In accordance with 45CSR5, Section 3.1., all particulate matter emissions from all coal processing (i.e. thermal dryer *TD1*) systems shall be limited to a maximum of twenty (20) percent opacity.
[45CSR13 - Permit R13-2104-§§ 4.2.1. & 4.1.9. and 45CSR§5-3.1.]

5.1.3. The provisions of 5.1.2. above shall not apply to particulate matter emitted, which is less than sixty percent (60%) opacity for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period during operation.
[45CSR13 - Permit R13-2104-§4.1.9. and 45CSR§5-3.2.]

5.1.4. The provisions of 5.1.2. and 5.1.3. above shall not apply to particulate matter emitted, which is less than sixty percent (60%) opacity for a period of up to eight (8) minutes in any operating day for the purposes of building a fire of operating quality in the fuel burning equipment of a thermal dryer.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§5-3.3.]

5.1.5. Particulate matter vented into the open air from the thermal dryer exhaust, shall not exceed 0.12 grains per [dry] standard cubic foot (gr/DSCF).
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§5-4.1.b. and 45CSR5 – Appendix §1.1.]

5.1.6. No person shall circumvent 45CSR5 by adding additional gas to any dryer exhaust or group of dryer exhaust for the purpose of reducing the grain loading.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§5-4.2.]

5.1.7. Exhaust gases from a thermal dryer shall not be vented into the open air at an altitude of less than eighty (80) feet above the foundation grade of the structure containing the dryer or less than ten (10) feet above the top of the said structure or any adjacent structure, whichever is greater. In determining the desirable height of a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate, and good engineering practice as set forth in 45CSR20.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§5-4.3.]

5.1.8. A monitoring device for the continuous measurement of the temperature of the gas stream at the exit of the thermal dryer shall be installed, calibrated, maintained, and continuously operated. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus three degrees Fahrenheit (± 3 °F) and is to be recalibrated at least once annually or as necessary.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§§5-4.1.b. & 9.2. and 45CSR5 – Appendix §§2.1. & 2.3]

5.1.9. A monitoring device for the continuous measurement of the pressure loss in the inlet airflow to the scrubber shall be installed, calibrated, maintained, and continuously operated. The pressure drop shall be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber which is atmospheric. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus one inch (± 1 in.) water gauge and is to be recalibrated at least once annually or as necessary.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§§5-4.1.b. & 9.2. and 45CSR5 – Appendix §§2.2.a. & 2.3.]

5.1.10. A monitoring device for the continuous measurement of the water supply pressure to the scrubber shall be installed, calibrated, maintained, and continuously operated. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus five percent (± 5%) water gauge and is be recalibrated at least once annually or as necessary.
[45CSR13 - Permit R13-2104-§4.1.9. 45CSR§§5-4.1.b. & 9.2. and 45CSR5 – Appendix §§2.2.b. & 2.3.]

5.1.11. Any stack venting thermal dryer exhaust gases and/or air table exhaust gases or exhaust gases or air from any air pollution control device shall include straight runs of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. Flow straightening devices shall be required where cyclonic gas flow would exist in the absence of such devices.
[45CSR§5-12.6.]

Sulfur Dioxide (SO_2) Requirements

5.1.12. Emissions of Sulfur Dioxide (SO_2) from the thermal dryer shall not exceed 56.85 pounds per hour nor 249 tons per year. Compliance with the annual emission limit shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the amount of Sulfur Dioxide (SO_2) emitted at any given time during the previous twelve (12) consecutive calendar months.
[45CSR13 - Permit R13-2104-§4.1.5.]

5.1.13. The sulfur dioxide emissions into open air from the thermal dryer shall not exceed an in-stack sulfur dioxide concentration of 2000 ppmv by volume.
[45CSR§10-4.1.]

5.1.14. Compliance with the allowable sulfur dioxide concentration limitations contained in 5.1.13. above, shall be based on a block three (3) hour averaging time.
[45CSR§10-4.2.]

5.1.15. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR§10-4.1. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a.]

5.2. Monitoring Requirements

5.2.1. The permittee shall demonstrate compliance with the SO_2 emission limits set forth under conditions 5.1.12. and 5.1.13. above, by complying with the stipulations as stated below:

a. The owner or operator of a thermal dryer shall meet the following minimum coal sampling requirements:

1. The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the dryer may be obtained

2. Coal shall be sampled at least once per day

3. Minimum sample size shall be five hundred (500) grams.

4. A composite of the samples shall be analyzed at the end of each calendar month

b. Coal samples shall be prepared for analysis in accordance with procedures specified in ASTM D2013-86, "Standard Method of Preparing Coal Samples for Analysis."

c. The heat content of coal samples shall be determined in accordance with procedures specified in ASTM D2015-85, "Standard Test Method for Gross Calorific Value of Solid fuel by the Adiabatic Bomb Calorimeter," or ASTM D5865, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter."

d. The sulfur content of coal samples shall be determined in accordance with procedures specified in ASTM D3177-84, "Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke", or ASTM D4239-85, "Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods" or any other method approved by the Director.

1. An excursion shall be defined as sulfur content of fuel greater than 1.18% with a heat content of 13,000 Btu/lb (As the heat content increases the allowable sulfur content increases proportionally) in accordance with "Indicator 1" of the submitted CAM Plan. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

e. The owner or operator of a thermal dryer shall calculate the SO_2 emissions for each month based on the Maximum heat input of 105 mmBtu/hr and the results of the analyses for sulfur and heat content for the month according to the following equations:

Equation 1:

$$SO_2\ (lb/hr) = 2 \times (MFR/\ HV) \times (S/100) \times (1\text{-}CE/100)$$

Where:

MFR = Maximum heat input of 105,000,000 Btu/hr
HV = Heating value of fuel in Btu/lb
S = Percent sulfur content of fuel
CE = Wet scrubber percent SO_2 control efficiency (i.e., 70%)
2 = 2 lb SO_2 per 1lb S

Equation 2:

$$\underline{SO_2\ (ppmv)} = SO_2\ (lb/hr) \times (385/64) \times (1/133{,}620) \times (1/60) \times 10^6$$

Where:

SO_2 (ppmv) = Sulfur dioxide concentration by volume
SO_2 (lb/hr) = Sulfur dioxide weight rate
385 = Molar volume in scf/lb-mole
64 = Molecular weight of Sulfur dioxide in lb/lb-mole
133,620 = Exhaust fan volumetric flow rate in standard cubic feet per minute (scfm)
60 = Minutes per hour

If compliance with 45CSR§10-4.1. can be demonstrated with these "worse case" conditions (i.e., by using the maximum design heat input, and the minimum volumetric gas flow rate in the equations), then compliance at lower heat inputs and/or higher stack gas flow rates will be ensured.

[45CSR§30-5.1.c., 45CSR§10-8.2.c., 45CSR10A - Monitoring Plan, 45CSR13 - Permit R13-2104-§§4.1.6. & 4.1.7., and 40CFR§§64.6(c) & 64.7(d)]

5.2.2. **Proper Maintenance** – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[45CSR§30-5.1.c., 40 C.F.R. §64.7(b)]

5.3. Testing Requirements

5.3.1. To determine compliance with the opacity limits of permit condition 5.1.2., the permittee shall conduct weekly visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for the thermal dryer. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed.
[45CSR13 - Permit R13-2104-§4.2.1.]

5.3.2. The thermal dryer unit included in this permit shall be observed visually during periods of building a fire of operating quality to ensure particulate matter emissions of sixty percent (60 %) opacity for a period of up to 8 minutes in any operating day is not exceeded during such activities
[45CSR§30-5.1.c.]

5.3.3. The permittee shall conduct tests to determine compliance with the particulate matter (PM) emission limitations in accordance with the frequency established in the following table and the results of the most recent tests already conducted (*see Fact Sheet*). The permittee shall use Method 5 or an alternative method approved by the Director for such testing. Parameter indicator ranges shall be re-established or verified for the exit temperature of the thermal dryer, water pressure to the control equipment, and the pressure loss of the inlet airflow to the scrubber. The permittee shall re-establish and/or verify these indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The Director shall be furnished with a written report of the results of such testing and established indicator ranges. The permittee shall also record the following parameters during such testing:

a. Opacity readings on the exhaust stack following the procedures of Method 9;

b. Amount of coal burned and the amount of coal dried;

c. Coal drying temperature and residence time in the dryer;

d. Temperature of the gas stream at the exit of the thermal dryer;

e. Flow rate through the dryer and converted to dry standard cubic feet;

f. Water pressure to the control equipment; and

g. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

Subsequent testing to determine compliance with the particulate loading limitations of 5.1.5. above, shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % of particulate loading limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤ 50% of particulate loading limit	Once/5 years
Annual	If annual testing is required, and any test indicates a mass emission rate ≥ 90% of particulate loading limit	Annual
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤ 50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years, and any test indicates mass emission rates between 50% and 90% of particulate loading limit	Once/3 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥ 90% of particulate loading limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates ≤ 50% of particulate loading limit	Once/5 years
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90% of particulate loading limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥ 90% of particulate loading limit	Annual

The current inlet water pressure parameter is set at 10.1 psi and the pressure drop is set at 23 inches of H_2O. An excursion per the 40CFR64 CAM Plan is defined as values below these current values based on a 3-hour rolling average. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

If during the next scheduled test or subsequent testing thereafter, the parameter set points are re-established the permittee shall submit a modification to the CAM Plan

[45CSR§30-5.1.c., 40 CFR §64.7(d)]

5.4. Recordkeeping Requirements

5.4.1. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the daily inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR13 - Permit R13-2104-§4.2.1., 45CSR§30-5.1.c.]

5.4.2. The fuel usage being continuously measured with a rotary counter shall be recorded and compiled at the end of each day on a lbs/day basis. The operation of the rotary counter shall be verified by daily visual inspection.
[45CSR§30-5.1.c., 40 CFR §64.6(c)]

5.4.3. The measured pressure drop of 5.1.9. above, and the measured water supply pressure of 5.1.10 above, shall be continuously recorded by a strip chart(s) and manually recorded once every 12 hours.
[45CSR§30-5.1.c., 40 CFR §64.6(c)]

5.4.4. For CAM, the owner or operator shall comply with the recordkeeping requirements of permit conditions 3.4.1. and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[45CSR§30-5.1.c., 40 CFR §64.9(b)]

5.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - Permit R13-2104-§4.4.2.]

5.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2104-§4.4.3.]

5.5. Reporting Requirements

5.5.1. Upon observing any visible emissions in excess of twenty percent (20%) opacity, or excess of forty (40%) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, the company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading.
[45CSR13 - Permit R13-2104-§4.2.1.]

5.5.2. For CAM, monitoring reports shall be submitted to the director and at a minimum shall include and be in accordance with information in permit conditions 3.5.6. and 3.5.8. as applicable. Also, at a minimum, the following information, as applicable, shall be included:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[45CSR§30-5.1.c., 40 CFR §64.9(a)]

5.6. Compliance Plan

5.6.1. None

APENDICES

(APPENDIX A, APPENDIX B, APPENDIX C and APPENDIX D from Permit R13-2104)

APPENDIX A [1]
"Breaker Building Throughput"

Month _____ Year _____

Day	Operating Schedule (hours)	- Raw Coal - Conveyor C-1 Transfer Point T5 (tons)	- Lime - Conveyor C-19 Transfer Point T50 (tons)	{Blank}	{Blank}
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Monthly Total -					
12 Month Rolling Total					
Maximum Permitted Amount		***4,300,000 tons***	***219,000 tons***		

(1) The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. All records shall be kept on site for a period of no less than five (5) years and shall be made available to the Secretary or his or her duly authorized representative upon request.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____

(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____

(please print or type) Name Title

Telephone No._____ Fax No._____

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[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Appendix B [1]
Wet Wash Preparation Plant Throughput

Month _____ **Year** _____

Day	Plant Operating Schedule (hours)	Raw Coal To Plant Conveyor C-9 Transfer Point T19 (tons)	Clean Coal To Thermal Dryer Conveyor C-12 Transfer Point T30 - (tons)	Clean Coal To Railcar Loadout Conveyor C-13B Transfer Point T33 (tons)	Refuse To Loadout Bins/Embankment Conveyor C-10 Transfer Point T54 - (tons)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Monthly Total					
12 Month Rolling Total					
Maximum Permitted Amount		***4,300,000 tons***	***3,010,000 tons***	***3,010,000 tons***	***2,250,000 tons***

[1] The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. All records shall be kept on site for a period of no less than five (5) years and shall be made available to the Secretary or his or her duly authorized representative upon request.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____

(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____

(please print or type) Name Title

Telephone No._____ Fax No._____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Appendix C [1]

Daily and Monthly Water and Usage Report for the Water Truck

Month _____ **Year** _____

Date	Fixed Water Spray System (gallons)	Water Truck (gallons)	Comments, Maintenance, Repair Records, etc.[2]	Initials
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

(1) The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. All records shall be kept on site for a period of no less than five (5) years and shall be made available to the Secretary or his or her duly authorized representative upon request.

(2) Use the comment section to explain why the fixed water spray system and/or water truck was not in use or used sparingly, to note maintenance and repairs, etc.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

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Telephone No._____ Fax No._____

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d. The designated representative delegated with such authority and approved in advance by the Director.

APPENDIX D [1]
Weekly Opacity Testing Records

Date of Observation: _____

Data Entered by: _____

Reviewed by: _____

Date Reviewed: _____

Describe the General Weather Conditions: _____

_____

_____

Stack ID/Vent ID/ Emission point ID	Stack/Vent/Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Months of Visual Emissions	Comments

(1) The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. All records shall be kept on site for a period of no less than five (5) years and shall be made available to the Secretary or his or her duly authorized representative upon request

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____

(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____

(please print or type) Name Title

Telephone No._____ Fax No._____

---

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d. The designated representative delegated with such authority and approved in advance by the Director.

Pinnacle Mining

54-109-00006

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West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Pinnacle Mining Company, LLC
Pinnacle Preparation Plant
R30-10900006-2017

William F. Durham
Director

Issued: March 2, 2017 • Effective: March 16, 2017
Expiration: March 2, 2022 • Renewal Application Due: September 2, 2021

Permit Number: **R30-10900006-2017**
Permittee: **Pinnacle Mining Company, LLC**
Facility Name: **Pinnacle Preparation Plant**
Mailing Address: **P.O. Box 338, Pineville, West Virginia 24874**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Pineville, Wyoming County, West Virginia
Mailing Address:	P.O. Box 338, Pineville, West Virginia 24874
Telephone Number:	304-732-9720
Type of Business Entity:	LLC
Facility Description:	The facility is a coal preparation plant which processes raw coal from an associated underground bituminous coal mine plus other raw coal sources. The preparation involves separating the higher ash reject and pyrite from the rest of the material, leaving a low ash and low sulfur coal. Operations at the plant include breaking, crushing, handling, screening, washing, and drying.
SIC Codes:	1222
UTM Coordinates:	456.10 km Easting • 4,155.40 km Northing • Zone 17

Permit Writer: Denton B. McDerment

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits 3

2.0. General Conditions 12

3.0. Facility-Wide Requirements and Permit Shield 21

Source-specific Requirements

4.0. Thermal Dryer 30

5.0. Transfer Points 38

6.0. Coal Storage and Stockpiles 40

7.0. Refuse Bin, Refuse Area, Refuse Stockpile 42

ATTACHMENT A – Monthly Processing Rate Report
ATTACHMENT B – Monthly Delivery Rate Report from Outside Suppliers
ATTACHMENT C – Monthly Transfer Rate Report
ATTACHMENT D – Monthly Refuse Storage (ST-12) Report
Certification of Data Accuracy

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
Saw Mill Storage Addition							
OS-1	631,000 Tons	I – 1998 M- 1999 M-2000,2001, 2002	Open Stockpile OS-1 - Receives coal via dump truck. A front-endloader is used to move coal from the Open Stockpile OS-1 to trucks for hauling to Stockpiles ST-2, ST-11, ST-13, ST-14, ST-16, or Storage Pit ST-10.	N	B A	T65 T92	MD N
Rotary Breakers (C11-1 & C11-2) Circuit							
ST-14	54,000 Tons	I - 2001 M-2002	Raw Coal Open Stockpile ST-14 - Receives coal by truck from Stockpile OS-1 and off site suppliers and transfers it via front-endloader to Dump Hopper DH-3 and/or front endloader to truck.	N	B A	T93 T94 T104	MC PE MC
DH-3	45 Tons	I – 2001	Dump Hopper DH-3 - Receives coal via truck and/or front-endloader from Raw Coal Open Stockpile ST-14 and transfers it to Conveyor C10-3.	PE	B A	T94 T95	PE PE
C10-3	1,000 TPH	I – 2001	Conveyor C10-3 - Receives coal from Dump Hopper DH-3 and transfers it to Mine Car Dump MCD-1.	PE	B A	T95 T96	PE FE
MCD-1	40 Tons	I – 2001	Mine Car Dump MCD-1 - Receives coal from Conveyor C10-3 and transfers it to Conveyors C11 - 1 and/or C11-2 via feeders in the bottom of MCD-1.	PE	B A	T96 T72A, T72B	PE FE FE
C11-1	1,000 TPH	I - 1970	Conveyor C11-1 - Receives coal from Mine Car Dump MCD-1, Conveyor S3A and Conveyor C11-4, and transfers it to Rotary Breaker 13-1.	PE	B A	T72A T73 T75 T111	FE PE PE PE
C11-2	1,000 TPH	I - 1970	Conveyor C11-2 - Receives coal from Mine Car Dump MCD-1, Conveyor C11-4, and Conveyor S3A and transfers it to Rotary Breaker 13-2.	PE	B A	T72B T74 T76 T112	FE PE PE PE

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
C11-4	800 TPH	I -1979	Conveyor C11-4 - Receives coal from the Storage Pit ST-10 and transfers it to Belt Conveyor C11-1 and/or Belt Conveyor C11-2.	PE	B A	T4-9 T73 T74	PE PE PE
Rotary Breaker 13-1 (13-1E)	1,000 TPH	I – 1970	Rotary Breaker 13-1 - Receives coal from Conveyor C11-1. Transfers refuse to Belt Conveyor 8A. Transfers coal through a feeder to the 60" Raw Coal Belt Conveyor C24.	FE	B A	T75 T8-1 T9-1A	PE PE PE
Rotary Breaker 13-2 (13-2E)	1,000 TPH	I - 1970	Rotary Breaker 13-2 - Receives coal from Conveyor C11-2. Transfers refuse to Belt Conveyor 8A. Transfers coal through a feeder to the 60" Raw Coal Belt Conveyor C24.	FE	B A	T76 T8-2 T9-1B	PE PE PE
8A	Continued Under Refuse Circuit						
C24	Continued Under Raw Coal Handling System						
Raw Coal Handling System							
S10	4000 TPH	I - 1986 M – 1998 M – 2006	Conveyor S10 - Receives coal from No. 50 Mine and transfers it to Scalping Screen SS-1. Equipped with SS-1 bypass chute to divert coal directly to ST-11	PE	B A	----- T50 T120	----- FE N
S3A	2,500 TPH	I-1986 M-2002	Conveyor S3A – Receives coal from Scalping screen SS-1 and transfers it to Belt Conveyor C11-1 and/or C11-2.	PE	B A	T110 T111 T112	FE PE PE
SS-1	4000 TPH	I - 1998	Scalping Screen SS-1 - Receives coal from Conveyor S10. Oversized coal is routed to the Shawnee Rotary Breaker S6. Undersized coal goes to a two-way flop gate which can transfer coal to Conveyor RCT-1 or Conveyor S3B.	FE	B A	T50 T54 T51 T53 T110	FE FE FE FE FE
S6	1500 TPH	I-1986	Shawnee Rotary Breaker S6 - Receives coal from Scalping Screen SS-1. Refuse is transferred to Conveyor S7. Coal exiting the Rotary Breaker is transferred to Conveyor S5.	FE	B A	T54 T28-3, T27-5	FE PE PE
S7	Continued under Refuse Circuit						
RCT-1	4000 TPH	I – 1998	Conveyor RCT-1 – Receives coal from Scalping Screen SS-1 and transfers it to Conveyor S5.	FE	B A	T51 T52	FE FE

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
S5	4000 TPH	I - 1986 M - 1998	Conveyor S5 – Receives coal from Conveyor RCT-1 and Rotary Breaker S6, and transfers it to a Stack Tube/Stockpile ST-11. Note that Conveyor S5 was lengthened and its design capacity increased to 4,000 TPH.	PE	B A	T52 T27-5 T49	FE PE MD
ST-11	1,106,000 Tons	I - 1986 M-1998, 2001 M-2006	Stack Tube/Stockpile ST-11 - Receives coal from Conveyor S5, truck, and SS-1 bypass chute and transfers via underground feeder to Conveyor S3 and/or via front endloader to truck.	N	B A	T49 T120 T103 T32 T102	MD N N FE N
S3	2,500 TPH	I - 1986	Conveyor S3 – Receives coal from underground feeder located beneath Stack Tube/Stockpile ST-11 and transfers it to Conveyor S3B.	PE	B A	T32 T33	FE PE
S3B	4,000 TPH	I - 1986 M - 1998	Conveyor S3B - Receives coal from Conveyor S3 and Scalping Screen SS-1 two-way flop gate, and routes it to 60" Raw Coal Belt Conveyor C24. Design capacity increased to 4,000 TPH.	PE	B A	T33 T53 T34	PE FE PE

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
C24	4,000 TPH	I - 1970 M- 1994	Conveyor C24 - Receives coal from Conveyor S3B and Rotary Breakers 13-1 and 13-2 and transfers it to Raw Coal Storage Silo A ST-3, Conveyor C31, or Conveyor C31-A.	FE	B A	T34, T8-1, T8-2 T10-3, T10-2, T10-1	PE PE PE FE FE PE
Raw Coal to Storage and to Preparation Plant							
ST-3	6,000 Tons	I - 1970	6,000 Ton Raw Coal Storage Silo A ST-3 - Receives coal from Conveyor C24 and transfers it via one mass flow feeder and six 48" reciprocating feeders to a 48" Raw Coal Belt C37.	N	B A	T10-3 T12-1	FE FE
C31	4,000 TPH	I - 1970 M- 1994	Conveyor C31 - Receives coal from Conveyor C24 and transfers it to Raw Coal Storage Silo ST-4.	FE	B A	T10-2 T10-4	FE FE
ST-4	6,000 Tons	I - 1970	Raw Coal Storage Silo B ST-4 - Receives coal from Conveyor C31 and transfers it via one mass flow feeder and six 48" reciprocating feeders to a 48" Raw Coal Belt C37.	N	B A	T10-4 T12-2	FE FE
C31-A	4,000 TPH	I - 1981	Conveyor C31-A - Receives coal from Conveyor C24 and transfers coal to Stack Tube/Raw Coal Storage Stockpile ST-2.	PE	B A	T10-1 T11	PE MC
ST-2	77,000 Tons	I - 1981 M- 2001	Raw Coal Storage Stockpile ST-2 - Receives coal from Conveyor C31-A and truck dump and transfers it via front-endloader to Feeder C36, Storage Pit ST-10, trucks, and/or railcar.	N	B A	T11 T101 T100, T77 T113	MD MD MD MD, PE MD
C36	500 TPH	I - 1981	Feeder C36 - Receives coal from Raw Coal Storage Stockpile ST-2 and transfers it to the 48" Raw Coal Belt Conveyor C37.	PE	B A	T77 T12-3	PE FE
C37	1,500 TPH	I - 1970	48" Raw Coal Belt Conveyor C37 - Receives coal from the 48" Reciprocating Feeders from Raw Coal Storage Silos A and B (ST-3 and ST-4) and Feeder C36, and transfers it to Conveyor C45.	FE	B A	T12-1, T12-2, T12-3 T13	FE FE FE FE
C45	1,500 TPH	I - 1970	Conveyor C45 - Receives coal from Conveyor C37 and transfers it into the preparation plant.	PE	B A	T13 -----	FE -----

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
Refuse Circuit							
8A	400 TPH	I – 1992	Conveyor 8A - Receives refuse from Rotary Breakers 13-1 and 13-2. Refuse is transferred to Conveyor C8.	N	B A	T9-1a T9-1b T46-2	PE PE FE
C8	Continued below under C8						
S7	800 TPH	I - 1986	Conveyor S7 - Receives refuse from the Rotary Breaker S6 and transfers it to the 80 ton Rock Bin.	PE	B A	T28-3 T29	PE PE
Rock Bin	80 Ton	I - 1970	Rock Bin - Receives refuse from Conveyor S7 and transfers it to a 72" Reciprocating Feeder.	FE	B A	T29 -----	PE -----
Rock Crusher #6	280 TPH	I - 1970	Rock Crusher #6 - Receives refuse from Rock Bin and transfers it to 36" Rock Belt Conveyor C8.	FE	B A	T34-2a T35	FE FE
C8	400 TPH	I - 1970	36" Rock Belt Conveyor C8 - Receives refuse from Rock Bin #6, Rock Crusher #6, and Conveyor 8A. Transfers refuse to the 400 ton Refuse Bin ST-7.	PE	B A	T34-2b, T35, T46-2 T36	FE FE FE FE
C125	463 TPH	I - 1970	36" Plant Refuse Belt Conveyor C125 - Transfers refuse from the Preparation Plant's Washing Circuit to the 400 ton Refuse Bin ST-7.	PE	B A	----- T37	----- FE
ST-7	400 Ton	I - 1970	400 Ton Refuse Bin ST-7 - Receives coal refuse from 36" Rock Belt Conveyor C8 and 36" Plant Refuse Belt Conveyor C125 and transfers it to feeder 127 and then to Refuse Belt Conveyor C128-1 or the Emergency Refuse Stockpile.	FE	B A	T36 T37 -----	FE FE -----
C128-1	400 TPH	I - 1970	Conveyor - Receives refuse from Refuse Bin ST-7 and transfers it to Point "A" Storage Bin ST-8.	PE	B A	T38 T39	FE FE
ST-8	85 Tons	I - 1970	Point "A" Storage Bin ST-8 - Receives refuse from Conveyor C128-1 and transfers it to Belt Conveyor C128-2.	FE	B A	T39 -----	FE -----
C128-2	400 TPH	I - 1970	Conveyor C128-2 - Receives refuse from Storage Bin ST-8 and transfers it to Conveyor C128-3.	PE	B A	T40 T41	PE PE
C128-3	400 TPH	I - 1983	Conveyor C128-3 - Receives refuse from Conveyor C128-2 and transfers it to Conveyor C128-4.	N	B A	T41 T42	PE PE

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
C128-4	400 TPH	I - 1983	Conveyor C128-4 - Receives refuse from Conveyor C128-3 and transfers it to Conveyor C128-5.	N	B A	T42 T43	PE PE
C128-5	400 TPH	I - 2001	Conveyor C128-5 - Receives refuse from Conveyor C128-4 and transfers it to Conveyor C128-6.	N	B A	T43 T44	PE PE
C128-6	400 TPH	I-2006	Conveyor C128-6 - Receives refuse from Conveyor C128-5 and transfers it to Stacking Belt Conveyor.	PE	B A	T44 T121	PE PE
Stacking Belt Conveyor	400 TPH	I - 1970	Stacking Belt Conveyor - Receives refuse from Conveyor C128-6 and transfers it to the Refuse Stockpile ST-12.	PE	B A	T121 T45	PE MC
ST-12	26,000 Tons	I - 1970	Refuse Stockpile ST-12 – Receives refuse from Stacking Belt Conveyor and dozers move to permanent storage.	N	B A	T45 -----	MC -----
Rotary Breakers (13-1 & 13-2) Bypass							
Raw Coal Auger Sampler	N/A	I – 1998	Raw Coal Auger Sampler - Samples coal from dump trucks at the truck scales. Emissions are expected to be minimal.	N	B A	----- -----	----- -----
ST-10	50 Tons	I – 1979 M – 2001	Raw Coal Storage Pit ST-10 - Receives coal from dump trucks and front-endloader and transfers it to Conveyor C11-4.	PE	B A	T4-8 T105 T4-9	MC MC PE
C11-4	Continued Under Rotary Breakers (13-1 & 13-2) Circuit						
RC-1	Continued under Clean Coal Circuit						

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
Clean Coal Circuit							
TD1	800 TPH	I - 1970 M- 1996	McNally Fluidized bed Thermal Dryer with two cyclones and two venturi scrubbers.	CY,SC, ME	B A	------ 001-2A,B	------ CY,SC,ME
C100	800 TPH	I - 1970	42" Dryer Feed Belt Conveyor C100 - Transfers wet coal from Preparation to Thermal Dryer, which dries it and transfers to Horizontal Axis Mixer No. 120.	PE	B A	------ T15	----- PE
C118	800 TPH	I - 1970 M-1995	54" Coarse Clean Coal Belt Conveyor - Receives coarse clean coal from inside Preparation Plant and transfers it to Horizontal Axis Mixer No. 120.	PE	B A	T48 T16	PE FE, SC
Horizontal Axis Mixer No. 120	320 TPH	I - 1970	Horizontal Axis Mixer No. 120. Receives coarse clean coal from Conveyor C118 and clean coal from Thermal Dryer, and transfers coal to 72" Clean Coal Transfer Belt Conveyor C119.	FE	B A	T16 T17	FE, SC FE, SC
C119	1,000 TPH	I - 1970	72" Clean Coal Transfer Belt Conveyor C119 - Receives coal from the Horizontal Axis Mixer No. 120 and transfers coal to 48" Clean Coal Belt Conveyor C132.	FE	B A	T17 T18	FE, SC FE, SC
C132	1,000 TPH	I - 1970	48" Clean Coal Belt Conveyor C132 - Receives coal from the 72" Clean Coal Transfer Belt Conveyor C119 and transfers it to the 10,000 Ton Clean Storage Silo ST-5 and/or Conveyor SC-1.	FE	B A	T18 T19, T19A	FE, SC FE FE
ST-5	10,000 Ton	I – 1970	Storage 4 - 10,000 Ton Clean Coal Storage Silo ST-5. Receives coal from the 48" Clean Coal Belt Conveyor C132 and transfers it through one mass flow feeder and six 48" reciprocating feeders to a 72" Collecting Belt Conveyor C139.	FE	B A	T19 T20	FE FE, SC
C139	5,000 TPH	I - 1970 M - 1998	72" Collecting Belt Conveyor C139 - Receives coal from Storage 4 (ST-5) through one mass flow feeder and six 48" reciprocating feeders. Transfers coal to the 72" Belt Conveyor to Sampling Tower C141. Design capacity increased to 5,000 TPH.	FE	B A	T20 T21	FE, SC FE

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
C141	5,000 TPH	I - 1970 M – 1998	72" Belt Conveyor C141 - Receives coal from 72" Collecting Belt Conveyor C139 and Conveyor RC-1, and transfers it to the 72" Belt Conveyor C152. Design capacity increased to 5,000 TPH. A small portion of coal from Conveyor C141 is transferred to and from the Clean Coal Sampler System.	FE	B A	T21, T23 T24	FE FE FE
Clean Coal Sampler System (F01 & F02)	N/A	I - 1970 M - 1998	Clean Coal Sampler System - Receives coal from 72"Belt Conveyor C141 via Primary Sample Belt Conveyor and transfers it to the Primary Sample Crusher and the Nuclear Analyzer and subsequently back to conveyor C141.	FE	B A	----- -----	----- -----
C152	5,000 TPH	I - 1970 M - 1998	72" Belt Conveyor to Loading Bin C152 - Receives coal from 72" Belt Conveyor C141 and transfers it to the 200 Ton Loading Bin ST-6. Design capacity increased to 5,000 TPH.	FE	B A	T24 T25	FE FE
ST-6	200 Ton	I - 1970 M – 2001 M – 2004	200 Ton Loading Bin ST-6 - Receives coal from the 72" Belt Conveyor C152 and transfer it to railroad cars.	FE	B A	T25 T26	FE FE, DSS
SC-1	1,000 TPH	I – 1991	Belt Conveyor SC-1 - Receives coal from the 48" Clean Coal Belt Conveyor C132 and transfer it to the Stack Tube/Clean Coal Storage Stockpile ST-13.	PE	B A	T19A T19B	FE MC
ST-13	514,000 Tons	I - 1991 M – 1998 M – 2002	Stack Tube/Clean Coal Storage Stockpile ST-13 - Receives clean coal from Conveyor SC-1 and transfers it using six vibrating feeders to Belt Conveyor RC-1 and/or via front end loader to trucks. Up to 360,000 TPY combined may be trucked to and from ST-13.	N	B A	T19B T114 T22 T115	MC N FE N
RC-1	4,000 TPH	I – 1991 M – 1998	Belt Conveyor RC-1 - Receives coal from six vibrating feeders located underneath the Clean Coal Storage Stockpile ST-13 and also from Belt Conveyor RC-5, and transfers it to the 72" Belt Conveyor C141.	PE	B A	T22 T81 T23	FE PE FE
Trucked Coal and Coal Fines Circuit							
ST-16 (ST-16E)		I - 2002 A - 2008	Coal & Pond Fines Open Stockpile ST-16 – Receives coal and pond fines by truck and transfers it via front-end loader to Dump Hopper DHRC-4; via underground feeders to conveyor C120; and/or via front-end loader to truck.	N	B A	T122 T134 T124 T135 T126	N N PE MD FE
DHRC-4 (DHRC-4E)		N	Dump Hopper DHRC-4 – Receives coal and/or pond fines by front-end loader and transfers it to Conveyor C120.	PE	B A	T124 T125	MD MD

Equipment ID Number	Design Capacity	Year Installed / Modified (2)	Description	Method of Control (1)	Associated Transfer Points/Equipment		
					Location: B - Before A - After	ID. No.	Method of Control (1)
C120 (C120E)	1,150 TPH	I - 2002 A - 2008	Conveyor C120 – Receives coal and/or pond fines from Stockpile ST-16's underground feeders and/or Dump Hopper DHRC-4 and transfers it to Conveyor C121 or Conveyor RC-5.	PE	B A	T125 T126 T127A T127B	MD FE PE PE
C121 (C121E)	5 TPH	I - 2002 A - 2008	Conveyor C121 – Receives coal and/or pond fines from Conveyor C120 and transfers it to Conveyor C122 and Sample Collector.	PE	B A	T127A T128	PE PE
C122 (C122E)	5 TPH	I – 2002 A – 2008	Conveyor C122 – Receives coal and/or pond fines from Conveyor C121 and transfers it to Conveyor RC5.	PE	B A	T129 T130	PE PE
RC-5 (RC-5E)	4000 TPH	I - 1998 M - 1999 M - 2001	Belt Conveyor RC-5 – Receives coal and/or coal fines from Conveyor C120 and C122 and transfers to Conveyor RC-1 (see Clean Coal Circuit).	N	B A	T125 T127B T130 T81	PE PE PE PE
Roadways							
PRP	N/A	I - 1970 M- 2001	Paved Roadways and parking lots.	RWMW	N/A	N/A	N/A
URP	N/A	I - 1970 M- 2001	Unpaved Roadways and parking lots	RWMW	N/A	N/A	N/A

(1) Method of Control abbreviations: FE - Full Enclosure, PE - Partial Enclosure, MD - Minimization of Material Drop Height, N – None, MC – Moisture Control, DSS – Dust suppressant Spray, CY – Cyclones, SC – Scrubbers, ME – Mist Eliminator, RWMW – Water Truck with Manufactured Pressurized sprays

(2) I – Year Installed, M- Year Modified, A-Year Added , N-Not installed yet

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2183K	April 28, 2008

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding. **[45CSR§30-5.3.e.3.B. and 45CSR38]**

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect. **[45CSR§30-5.1.e.]**

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. Fugitive dust control methods, such as full enclosures, partial enclosures, and water sprays, proposed in Permit Applications R13-2183K, R13-2183J, R13-2183I, R13-2183G, R13-2183F, R13-2183E, R13-2183D, R13-2183C, R13-2183B (PD99-169), R13-2183A (PD99-062), R13-2183, and R13-1831 and any amendments or supplements thereto shall be installed, operated, and maintained in such a manner so as to minimize the generation and atmospheric entrainment of fugitive particulate emissions. A freeze protection plan shall be incorporated to insure that the wet suppression systems remain operational at all times. In accordance with the information filed, the methods of control given in the Equipment Table in Section 1.0. of this permit shall be installed, maintained, and operated so as to minimize the emission of PM (particulate matter) and PM_{10} (particulate matter less than ten microns in diameter).
[45CSR13, R13-2183, A.10.]

3.1.10. The permittee shall maintain a water truck on site and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used.

The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the surface being treated.

The pump delivering the water, or solution shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure.
[45CSR13, R13-2183, A.11.]

3.1.11. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system, coal processing and conveying equipment, coal storage system, or coal transfer and loading system which is twenty percent (20%) opacity or greater. These opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. Note that the regulatory citations 40 C.F.R. §§ 60.254(a), 60.11(c), and 45CSR16 (below) apply only to the 40 C.F.R. 60 Subpart Y affected facilities, which are those listed in Section 5.0. of this permit.
[45CSR13, R13-2183, B.2. & B.4; 45CSR§5-3.4.; 40 C.F.R. §60.254(a); 40 C.F.R. §60.11(c); 45CSR16]

3.1.12. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
[45CSR13, R13-2183, B.2., and 45CSR§5-6.1.]

3.1.13. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased, or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening, and general maintenance to minimize dust generation and atmospheric entrainment.
[45CSR13, R13-2183, B.2., and 45CSR§5-6.2.]

3.1.14. The permitted facility shall be constructed and operated in accordance with information filed in Permit Applications R13-2183K, R13-2183J, R13-2183I, R13-2183G, R13-2183F, R13-2183E, R13-2183D, R13-2183C, R13-2183B (PD99-169), R13-2183A (PD99-062), R13-2183, and R13-1831 and any amendments thereto.
[45CSR13, R13-2183, A.1.]

3.2. Monitoring Requirements

3.2.1. The permittee shall conduct monitoring/recordkeeping/reporting as follows: [Not required for stockpiles and haulroads – OS1, ST-14, ST-2, ST-11, ST-12, ST-13, ST-16, PRP, URP] To determine compliance with the opacity limit of permit condition 3.1.11., the permittee shall conduct weekly visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for all coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems. These observations shall be conducted during periods of normal facility operation for a sufficient time interval (but no less than one (1) minute) to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed. Records of all observations shall be maintained in accordance with permit condition 3.4.4.
[45CSR§30-5.1.c.]

3.2.2. The permittee shall inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the monthly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.2.3. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility.
[45CSR§30-5.1.c.]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.3.2. Any stack venting thermal dryer exhaust gases and/or air table exhaust gases or exhaust gases or air from any air pollution control device shall include straight runs of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. Flow straightening devices shall be required where cyclonic gas flow would exist in the absence of such devices.
[45CSR13, R13-2183, B.2., 45CSR§5-12.6.]

3.3.3. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, the owner or operator of such facility shall conduct performance test(s) to determine compliance with emission limitations set forth in 40 C.F.R. §60.254(a) and furnish a written report of the results of such performance test(s).
[40 C.F.R. §60.8(a), 45CSR16, and 45CSR13, R13-2183, B.4.] [DHRC-4, C120, C121 and C122]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. A record of each visible emissions observation required by permit condition 3.2.1. shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following addresses:

DAQ:	**US EPA:**
DEPAirQualityReports@wv.gov	R3_APD_Permits@epa.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. There is no compliance plan since the permittee certified compliance with all applicable requirements in the renewal application.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

Regulation	Rationale
45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Oxides. The thermal dryer is not part of a refinery process gas stream or any other process gas stream that contains hydrogen sulfides to be combusted. Therefore, 45CSR§10-5.1 does not apply to the thermal dryer.
40 C.F.R. Part 60, Subpart Y	Standards of Performance for Coal Preparation and Processing Plants. Several units (Thermal dryer, C11-1, C11-2, Rotary Breakers 13-1 &13-2, ST-3, ST-4, C37, C45, Rock Bin, Rock Crusher #6, C8, C125, C128-1, C128-2, C100, Horizontal Axis Mixer No. 120, and C119) were installed prior to October 27, 1974. Therefore, this subpart does not apply to these units per 40 C.F.R. §60.250(b). Also, this subpart does not apply to all coal, refuse, and fines open storage piles because they were installed prior to May 27, 2009.
40 C.F.R. Part 64	This is the third permit renewal for this facility. At the time of the first renewal, a CAM applicability review was conducted, and CAM requirements were added. No changes have been made at this facility since the second renewal that would require additional CAM permit conditions. The prior CAM review is as follows: Cyclones (001-01A & 001-01B) – These two cyclones pre-clean the thermal dryer exhaust gas before it enters the exhaust fan that pushes it through two (2) parallel venturi scrubbers (Control Device IDs 001-02A, 001-02B). Finer dried coal from the thermal dryer exhaust is removed by the cyclones. This dried coal reporting to the cyclones is used as fuel in the thermal dryer furnace because it is finer and thus requires less processing by the pulverized coal feed system. Because the cyclones are a critical part of the product recovery and furnace fuel system, they are deemed *inherent process equipment* in accordance with the definition in 40 C.F.R. §64.1, and therefore the cyclones do not require a CAM Plan. Mixer Scrubber (004) – This scrubber controls PM emissions from transfer points T16 (horizontal axis mixer), T17, and T18. According to the permittee's calculations in the application, the aggregate pre-control PTE for these three transfer points is 785 lb/yr + 7,513 lb/yr + 7,513 lb/yr = 15,811 lb/yr = 7.91 ton/yr. This is less than 100 ton/yr, and therefore is not a pre-control "major source". Therefore, the Mixer Scrubber 004 is not subject to 40 C.F.R. 64.

Regulation	Rationale
	Clean Coal Scrubber (0011) – This scrubber controls PM emissions from transfer points T20 and T21. According to the permittee's calculations in the application, the aggregate pre-control PTE for this transfer point is 2,254 lb/yr. This is less than 100 ton/yr, and therefore is not a pre-control "major source". Therefore, the Clean Coal Scrubber 0011 is not subject to 40 C.F.R. 64.

4.0 Thermal Dryer [emission point ID(s): TD1]

4.1. Limitations and Standards

4.1.1. The thermal dryer shall not be operated more than 7,083 hours per year. The permittee shall maintain records showing the number of hours each calendar day the thermal dryer was in operation.
[45CSR13, R13-2183, A.2.]

4.1.2. Emissions from the thermal dryer shall not exceed the following hourly and annual limits:

Pollutant	Emissions Limitations	
	One-Hour Average (lb/hour)	**Annual (ton/year)**
Volatile Organic Compounds (VOCs)	41.3	146
SO_2	50.3	178
NO_x	93.9	332
CO	50.3	178
Particulate Matter (PM)	77.0	272

[45CSR13, R13-2183, A.4.]

4.1.3. Scrubber water flow shall be maintained at a minimum of 2,240 gpm. The scrubber water system shall receive clean water from the clarifier water sump, and shall discharge dirty water to the clarifier centerwell for solids removal. Pressure drop across the scrubber shall be adjusted as required to control particulate matter emissions. Alkaline agents may be added to the scrubber water to control sulfur dioxide emissions.
[45CSR13, R13-2183, A.5.]

4.1.4. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 ppmv by volume from existing source operations.
[45CSR13, R13-2183, B.3., and 45CSR§10-4.1.]

4.1.5. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any stack which is twenty percent (20%) opacity or greater, except as noted in 45CSR§5-3.2.
[45CSR13, R13-2183, B.2., and 45CSR§5-3.1.]

4.1.6. The provisions of permit condition 4.1.5. shall not apply to particulate matter emitted, which is less than sixty percent (60%) opacity for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period during operation.
[45CSR13, R13-2183, B.2., and 45CSR§5-3.2.]

4.1.7. The provisions permit conditions 4.1.5. and 4.1.6. shall not apply to particulate matter emitted, which is less than sixty percent (60%) opacity for a period of up to eight (8) minutes in any operating day for the purposes of building a fire of operating quality in the fuel burning equipment of a thermal dryer.
[45CSR13, R13-2183, B.2., and 45CSR§5-3.3.]

4.1.8. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from the thermal dryer exhaust in excess of 0.083 grains per standard cubic foot.
[45CSR13, R13-2183, B.2., 45CSR§5-4.1.b., and 45CSR5 Appendix 1.2.]

4.1.9. No person shall circumvent 45CSR§5-4.1.b. (permit condition 4.1.8) by adding additional gas to any dryer exhaust or group of dryer exhaust for the purpose of reducing the grain loading.
[45CSR13, R13-2183, B.2., and 45CSR§5-4.2.]

4.1.10. No person shall cause, suffer, allow or permit the exhaust gases from a thermal dryer to be vented into the open air at an altitude of less than eighty (80) feet above the foundation grade of the structure containing the dryer or less than ten (10) feet above the top of the said structure or any adjacent structure, whichever is greater. In determining the desirable height of a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate, and good engineering practice as set forth in 45CSR20.
[45CSR13, R13-2183, B.2., and 45CSR§5-4.3.]

4.2. Monitoring Requirements

Note: For purposes of complying with 40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM), the words "*indicator*" or "*indicators*" shall mean the specific parameters to be monitored, measured, polled, or sampled (as applicable). Operation of the equipment while each indicator is within the acceptable range (defined below for each indicator) will provide a reasonable assurance of compliance with applicable emission limitations or standards for the anticipated range of operations of the equipment.

4.2.1. **Thermal Dryer Exhaust Temperature** – The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the temperature of the gas stream at the exit of the thermal dryer between the dryer exhaust fan and the venturi scrubbers. An excursion shall be defined as a 1-hour average temperature outside of the acceptable thermal dryer exhaust temperature defined as 170ºF to 240ºF. Excursions trigger an inspection and evaluation, corrective action, recordkeeping and reporting requirements (permit conditions 4.2.10., 4.4.3., and 4.5.1.). The monitoring device is to be certified by the manufacturer to be accurate within plus or minus three degrees Fahrenheit (± 3 ºF) and be recalibrated as necessary, but at least semi-annually. The monitoring system shall continually sense the indicator, poll the indicator several times per minute, compute 1-minute averages, and use these 1-minute averages to compute and record a 1-hour average. This is Indicator 1 of 3 for particulate matter control under the 40 C.F.R. 64 plan.
[45CSR13, R13-2183, B.2.; 45CSR§§5-4.1.b. & 9.2; and 45CSR5 Appendices 2.1. and 2.3.; 40 C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2); 45CSR§30-12.7.]

4.2.2. **Scrubber Water Supply Pressure** – The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the water supply pressure to the scrubber. An excursion shall be defined as a 1-hour average pressure less than the minimum acceptable scrubber water supply pressure defined as 7-psig. Excursions trigger an inspection and evaluation, corrective action, recordkeeping and reporting requirements (permit conditions 4.2.10., 4.4.3., and 4.5.1.). The monitoring device is to be certified by the manufacturer to be accurate within plus or minus five percent (± 5%) water column and be recalibrated as necessary, but at least semi-annually. The monitoring system shall continually sense the indicator, poll the indicator several times per minute, compute 1-minute averages, and use these 1-minute averages to compute and record a 1-hour average. This is Indicator 2 of 3 for particulate matter control, and also Indicator 1 of 3 for sulfur dioxide control, under the 40 C.F.R. 64 plan.
[45CSR13, R13-2183, B.2.; 45CSR§§5-4.1.b. & 9.2; and 45CSR5 Appendices 2.2.b. and 2.3.; 40 C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2); 45CSR§30-12.7.]

4.2.3. **Scrubber Inlet Static Pressure** – The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the continuous measurement of the pressure loss through the scrubber. The pressure drop will be measured at the inlet to the scrubber. An excursion shall be defined as a 1-hour average pressure less than the minimum acceptable scrubber inlet static pressure defined as 18 inches of water column. Excursions trigger an inspection and evaluation, corrective action, recordkeeping and reporting requirements (permit conditions 4.2.10., 4.4.3., and 4.5.1.). The monitoring device is to be certified by the manufacturer to be accurate within plus or minus one inch (±1 in.) water column and be recalibrated as necessary, but at least semi-annually. The monitoring system shall continually sense the indicator, poll the indicator several times per minute, compute 1-minute averages, and use these 1-minute averages to compute and record a 1-hour average. This is Indicator 3 of 3 for particulate matter control under the 40 C.F.R. 64 plan.
[45CSR13, R13-2183, B.2.; 45CSR§§5-4.1.b. & 9.2; and 45CSR5 Appendices 2.2.a. and 2.3.; 40 C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2); 45CSR§30-12.7.]

4.2.4. **Dryer Fuel Coal Sulfur Content** – The permittee shall sample in accordance with approved ASTM methods on at least a daily basis the fuel coal burned in the furnaces and have the samples analyzed for sulfur and BTU content. The analysis results shall be accurate within ±0.1 weight percent. Result of these analyses shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request. If the sulfur content exceeds 1.09 percent on a dry basis, the permittee shall add sodium hydroxide solution in accordance with permit condition 4.2.5. to the scrubber water and/or to the coal being dried to reduce sulfur dioxide emissions. Compliance with the more stringent limit (1.09 weight percent before adding NaOH) proposed by the permittee, and enforceable under 45CSR§30-12.7., ensures compliance with the 1.22 weight percent threshold prior to NaOH addition set forth by R13-2183, A.3. An excursion shall be defined as exceeding the 1.09 weight percent limit without addition of sodium hydroxide in accordance with permit condition 4.2.5. Excursions trigger an inspection and evaluation, corrective action, recordkeeping and reporting requirements (permit conditions 4.2.10., 4.4.3., and 4.5.1.). This permit condition accounts for Indicator 2 of 3 for sulfur dioxide control under the 40 C.F.R. 64 plan.
[45CSR13, R13-2183, A.3., and 40 C.F.R. §64.3(b); 45CSR§30-12.7.; 45CSR§10-8.2.c.]

4.2.5. **Sodium Hydroxide (NaOH) Addition Rate** – The metering pump shall be used to add 0.51 gallons per minute of 20% sodium hydroxide solution to the scrubber water and/or to the coal being dried based upon sulfur content determined under permit condition 4.2.4. The metering pump used to add NaOH solution shall be calibrated monthly during NaOH addition by measuring the time to deliver a specified volume of the solution. The minimum accuracy of the metering pump shall be ±0.1 gallons per minute. The monitoring system shall continually sense the indicator (NaOH addition rate), poll the indicator several times per minute, compute 1-minute averages, and use these 1-minute averages to compute and record a 1-hour average. This permit condition accounts for Indicator 3 of 3 for sulfur dioxide control under the 40 C.F.R. 64 plan.
[45CSR13, R13-2183, A.3., and 40 C.F.R. §64.3(b); 45CSR§30-12.7.]

4.2.6. To determine compliance with the opacity limits of permit condition 4.1.5., the permittee shall conduct daily visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for the thermal dryer. These observations shall be conducted during periods of normal facility operation for a sufficient time interval (but no less than one (1) minute) to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed.
[45CSR§30-5.1.c.]

4.2.7. The thermal dryer unit(s) included in this permit shall be observed visually during periods of building a fire of operating quality and minimization efforts taken to ensure particulate matter emissions of sixty percent (60 %) opacity for a period of up to 8 minutes in any operating day is not exceeded during such activities.
[45CSR§30-5.1.c.]

4.2.8. **Proper maintenance**. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 C.F.R. § 64.7(b); 45CSR§30-5.1.c.]

4.2.9. **Continued operation**. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 C.F.R. § 64.7(c); 45CSR§30-5.1.c.]

4.2.10. **Response to Excursions or Exceedances**

(1) Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. § 64.7(d); 45CSR§30-5.1.c.]

4.2.11. **Documentation of need for improved monitoring**. After approval of monitoring under 40 C.F.R. 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 C.F.R. § 64.7(e); 45CSR§30-5.1.c.]

4.2.12. The permittee shall maintain daily records of the coal throughput of the thermal dryer and record the rolling yearly total of coal. A rolling yearly total shall mean the sum of coal throughput at any given time for the previous twelve (12) months.
[45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. At such reasonable times as the Secretary may designate, the owner or operator of a source(s) of any fuel burning unit(s) manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of section 3, 4 or 5 of 45CSR10. Such tests shall be conducted in accordance with the appropriate test methods 40 C.F.R. 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Secretary. The Secretary, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such a manner as the Secretary may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR13, R13-2183, B.3., and 45CSR§10-8.1.a.]

4.3.2. The Secretary, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§10-3.
[45CSR13, R13-2183, B.3., and 45CSR§10-8.1.b.]

4.3.3. At the request of the Secretary the owner and/or operator of a source shall install such stack gas monitoring devices as the Secretary deems necessary to determine compliance with the provisions of 45CSR§10-4.1. The data from such devices shall be readily available at the source location or such other reasonable location that the Secretary may specify. At the request of the Secretary, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR13, R13-2183, B.3., and 45CSR§10-8.2.a.]

4.3.4. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
[45CSR13, R13-2183, B.3., and 45CSR§10-8.2.b.]

4.3.5. The permittee shall conduct particulate matter stack testing no later than September 26, 2017, and shall establish and/or verify existing parameter indicator ranges. The Director shall be furnished with a written report of the results of such testing and established indicator ranges. The permittee shall use Method 5 or an alternative method approved by the Director for such testing. Parameter indicator ranges shall be re-established or verified for the exhaust temperature of the thermal dryer, water pressure to the scrubber, and the scrubber inlet static pressure. The permittee shall re-establish and/or verify these indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The permittee shall also record the following parameters during such testing:

a. Opacity readings on the exhaust stack following the procedures of Method 9;
b. Amount of coal burned and the amount of coal dried;
c. Coal drying temperature and residence time in the dryer;
d. Temperature of the gas stream at the exit of the thermal dryer;
e. Flow rate through the dryer and converted to dry standard cubic feet;
f. Water pressure to the control equipment; and
g. Scrubber inlet static pressure. The static pressure at the inlet of the scrubber will be measured.

Subsequent testing to determine compliance with the particulate loading limitations permit condition 4.1.8. shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Initial	≤ 50% of particulate loading limit	Once/5 years
Initial	between 50% and 90 % of particulate loading limit	Once/3 years
Initial	≥ 90% of particulate loading limit	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90% of particulate loading limit	Once/3 years

Test	Test Results	Testing Frequency
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤ 50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates ≤ 50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥ 90% of particulate loading limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90% of particulate loading limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥ 90% of particulate loading limit	Annual

Note: Previous testing was performed in 2012, and based upon those results, testing was not required again until 2017.

[45CSR§30-5.1.c.]

4.4. Recordkeeping Requirements

4.4.1. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the daily inspections, and the times the thermal dryer air pollution control system is inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

4.4.2. All thermal dryer scrubber malfunctions must be documented in writing. Records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request. At a minimum, the following information must be documented for each malfunction:

a. Cause of malfunction
b. Steps taken to:
   i. correct the malfunction
   ii. minimize emissions during malfunction
c. Duration of malfunction in hours
d. Estimated increase in emissions during the malfunction
e. Any change/modifications to equipment or procedures that would help prevent future recurrence of malfunction.

[45CSR13, R13-2183, B.1.]

4.4.3. **General Recordkeeping Requirements for 40 C.F.R. Part 64 (CAM)**

(1) The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 C.F.R. §64.9(b); 45CSR§30-5.1.c.]

4.5. Reporting Requirements

4.5.1. **General Reporting Requirements for 40 C.F.R. Part 64 (CAM)**

(1) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. Part 64, the permittee shall submit monitoring reports to the Director in accordance with permit condition 3.5.6.

(2) A report for monitoring under 40 C.F.R. Part 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
(iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.]

4.6. Compliance Plan

4.6.1. N/A

5.0 Transfer Points Subject to 40 C.F.R. 60, Subpart Y [emission point ID(s): Truck Dumping [at ST-10 (T4-8) and DH-3 (T93)]; Endloader [at OS-1 (T92), ST-2 (T77, T100 and T113), ST-10 (T105 and T4-9), ST-11 (T102), ST-13 (T119), ST-14 (T104), ST-16 (T135), DH-3 (T94, T95), DHRC-4 (T124, T125)]; Rail Car Loading Bin ST-6 (T25 and T26); Mine Car Dump MCD-1 (T72A and T72B); Conveyors: C24 (T10-1, T10-2 and T10-3), C31 (T10-4), C31A (T11), C36 Feeder (T12-3), C118 (T16), C132 (T19, T19A), SC-1 (T19B), ST-5 Reclaim System (T20), C139 (T21), ST-13 Reclaim System (T22), RC-1 (T23), C141 (T24), C152 (T25), ST-6 Reclaim System (T26), S3A (T111 and T112), S7 (T29), ST-11 Reclaim System (T32), S3 (T33), S3B (T34), C128-3 (T42), C128-4 (T43), 8A (T46-2), S5 (T49), S10 (T50), RCT-1 (T52), C11-4 (T73, T74), RC-5 (T81), C10-3 (T96), C128-5 (T44), C128-6 (T121), C120 (T127A, T127B), C121 (T128, T129), C122 (T130); Breaker: S6 (T54, T27-5, and T28-3); Screen: SS-1 (T50, T51, T53, and T54)]

5.1. Limitations and Standards

5.1.1. In accordance with the information filed, the following processing limits shall not be exceeded:

Type of Material and Location Where Processed	Maximum Amount to be Processed (TPY)
Raw coal feed from No. 50 Mine to Scalping Screen (SS-1)	6,900,000
Raw coal feed to Wet Wash Circuit/Preparation Plant (1,500 ton/hr * 7,083 hr/yr)	10,630,000
Feed coal from Wash Circuit to Thermal Dryer (800 ton/hr * 7,083 hr/yr)	5,670,000
Trucked Coal and/or Coal Fines from Conveyor RC-5 to Conveyor RC-1.	860,000
Clean coal/Coal Fines from Loading Bin ST-6 to railroad cars	8,100,000

[45CSR13, R13-2183, A.6.]

5.1.2. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 C.F.R. §60.11(d), 45CSR16, and 45CSR13, R13-2183, B.4.]

5.2. Monitoring Requirements

5.2.1. Refer to permit conditions 3.2.1. and 3.2.2.

5.3. Testing Requirements

5.3.1. Reserved.

5.4. Recordkeeping Requirements

5.4.1. For the purpose of determining compliance with the maximum throughput limits set forth in permit condition 5.1.1., the permittee shall maintain on site certified monthly and annual records of the raw coal, clean coal, and coal fines transfer rates in accordance with the example data forms provided as Attachment A. Records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request. Compliance with all annual throughput limits shall be determined using a twelve month rolling total. **[45CSR13, R13-2183, B.6. and A.9.]**

5.4.2. Refer to permit conditions 3.4.4.

5.5. Reporting Requirements

5.5.1. Reserved.

5.6. Compliance Plan

5.6.1. N/A

6.0 Coal Storage and Stockpiles [emission point ID(s): OS-1, ST-2, ST-10, ST-11, ST-13, ST-14, ST-16]

6.1. Limitations and Standards

6.1.1. In accordance with the information filed, the following storage and truck delivery limits shall not be exceeded:

Stockpile/Bin ID No.	Material Stored	Maximum in Storage (tons)	Maximum to be Delivered (TPY)[1]
Stockpile OS-1	raw coal	631,000	250,000
Stockpile ST-2	raw coal	77,000	180,000
Storage Pit ST-10	raw coal	≈ 50	550,000 [2, 3, 6]
Stockpile ST-11	raw coal	1,106,000	100,000 [4]
Stockpile ST-13	clean coal	514,000	360,000 [5]
Stockpile ST-14	raw coal	54,000	750,000 to 1,000,000 [6]
Stockpile ST-16	coal	120,000 Combined	360,000 [7]
	coal fines		500,000 [8]

(1) Maximum quantity of coal to be delivered via trucks by other suppliers from outside sources.
(2) Less the amount delivered directly to Stockpile ST-2.
(3) 0 TPY up to 250,000 TPY of the 550,000 TPY will pass over the truck scale near the refuse road.
(4) Less the amount transferred from other stockpiles.
(5) Up to 360,000 TPY combined may be received at or shipped from ST-13 by truck.
(6) The sum of coal trucked to Storage Pit ST-10 via the truck scale and the coal trucked to Stockpile ST-14 shall not exceed 1.0 million TPY.
(7) Up to 360,000 TPY of coal may be received at or shipped from ST-16 by truck.
(8) Up to 500,000 TPY of coal fines may be received at ST-16 by truck.

[45CSR13, R13-2183, A.7.]

6.1.2. In accordance with the information filed, the following transfer limits between coal storage areas shall not be exceeded:

Originating Stockpile ID No.	**Maximum Amount to be Transferred to Stockpiles Listed Below (TPY)[1]**						
	OS-1	ST-2	ST-10	ST-11	ST-13	ST-14	ST-16
OS-1	-----	100,000	350,000	100,000	100,000	100,000	100,000
ST-2	100,000	-----	280,000 [3]	100,000	100,000	100,000	100,000
ST-10	0	0	-----	0	0	0	0
ST-11	100,000	100,000	100,000	-----	100,000	100,000	100,000
ST-13	100,000	100,000	100,000	100,000	-----	100,000	100,000
ST-14	100,000	100,000	100,000	100,000	100,000	-----	100,000
ST-16	100,000	100,000	100,000	100,000	100,000	100,000	-----
All Areas [2]	100,000	100,000	530,000	100,000	100,000	100,000	100,000

(1) The quantities to be received for any single storage area are not additive.
(2) The last row summarizes the maximum amount that could be transferred to each storage area from all other storage areas.
(3) The permittee has the option to alternatively load up to 180,000 TPY into a railcar at ST-2 in lieu of transferring it to ST-10.

[45CSR13, R13-2183, A.8.]

6.1.3. The permittee shall maintain and operate a vacuum truck along the paved entrance(s) to Stockpile OS-1 at all times during which truck traffic is present, either receiving or shipping coal.
[45CSR13, R13-2183, A.12.]

6.2. Monitoring Requirements

6.2.1. Reserved.

6.3. Testing Requirements

6.3.1. Reserved.

6.4. Recordkeeping Requirements

6.4.1. For the purpose of determining compliance with the maximum throughput limits set forth in permit conditions 6.1.1. and 6.1.2., the permittee shall maintain on site certified monthly and annual records of the raw coal, clean coal, and coal fines transfer rates in accordance with the example data forms provided as Attachments B and C. Records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request. Compliance with all annual throughput limits shall be determined using a twelve month rolling total.
[45CSR13, R13-2183, B.6. and A.9.]

6.5. Reporting Requirements

6.5.1. Reserved.

6.6. Compliance Plan

6.6.1. N/A

7.0 Refuse Bin, Refuse Area, Refuse Stockpile [emission point ID(s): ST-7, ST-8, ST-12]

7.1. Limitations and Standards

7.1.1. In order to prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by 45CSR§5-7 (7.1.2. through 7.1.8.).
[45CSR13, R13-2183, B.2., and 45CSR§5-7.1.]

7.1.2. Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.2.]

7.1.3. Coal refuse disposal areas shall not be so located with respect to mine openings, tipples, or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.3.]

7.1.4. Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.4.]

7.1.5. Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.5.]

7.1.6. Materials with low ignition points used in the production or preparation of coal, including but not limited to wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.6.]

7.1.7. Garbage, trash, household refuse, and like materials shall not be deposited on or near any coal refuse disposal area.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.7.]

7.1.8. The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.
[45CSR13, R13-2183, B.2., and 45CSR§5-7.8.]

7.1.9. Each burning coal refuse disposal area which allegedly causes air pollution shall be investigated by the Secretary in accordance with the following: With respect to all burning coal refuse disposal areas, the person responsible for such coal refuse disposal areas or the land on which such coal refuse disposal areas are located shall use due diligence to control air pollution from such coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in section one of chapter twenty-two, article five of the code of West Virginia, as amended, the Secretary shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the Secretary establishes that air pollution exists or may be created, the person responsible for such coal refuse disposal area or the land on which such coal refuse disposal area is located shall submit to the Secretary a report setting forth satisfactory methods and procedures to eliminate, prevent, or reduce such air pollution. The report shall be submitted within such time as the Secretary shall specify. The report for the elimination, prevention or reduction of air pollution shall contain sufficient information, including completion dates, to establish that such program can be executed with due diligence. If approved by the Secretary, the corrective measures and completion dates shall be embodied in a consent order issued pursuant to W.Va. Code 22-5-1 et seq. If such report is not submitted as requested or if the Secretary determines that the methods and procedures set forth in such report are not adequate to reasonably control such air pollution, then a hearing will be held pursuant to the procedures established by W.Va. Code 22-5.
[45CSR13, R13-2183, B.2., and 45CSR§§5-8.1. and 8.3.]

7.1.10. The maximum amount of refuse in storage at the Refuse Storage ST-12 shall not exceed 26,000 tons.
[45CSR13, R13-2183, A.7.]

7.2. Monitoring Requirements

7.2.1. Reserved.

7.3. Testing Requirements

7.3.1. Reserved.

7.4. Recordkeeping Requirements

7.4.1. For the purpose of determining compliance with the maximum storage limit set forth in permit condition 7.1.10., the permittee shall maintain daily records of the amount (in tons) of refuse in storage at the beginning of each day, the amounts transferred to and from ST-12 each day, and the amount of refuse in storage at the end of each day. To facilitate this recordkeeping, an example data form is provided as Attachment D.
[45CSR§30-5.1.c.]

7.5. Reporting Requirements

7.5.1. Reserved.

7.6. Compliance Plan

7.6.1. N/A