

West Virginia Department of Environmental Protection

Harold D. Ward

Cabinet Secretary

Permit to Operate



Pursuant to

Title V

of the Clean Air Act

Issued to:

Monongahela Power Company
Harrison Power Station/ Haywood, WV
R30-03300015-2025

Laura M. Crowder

Director, Division of Air Quality

Issued: [Date of issuance] • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: **R30-03300015-2025**
Permittee: **Monongahela Power Company**
Facility Name: **Harrison Power Station**
Permittee Mailing Address: **800 Cabin Hill Drive, Greensburg, PA 15601-1650**

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:	Haywood, Harrison County, West Virginia
Facility Mailing Address:	P. O. Box 600, Haywood, WV 26366-0600
Telephone Number:	304-584-2233
Type of Business Entity:	Corporation
Facility Description:	Electric Generating Service
SIC Codes:	Primary 4911; Secondary NA; Tertiary NA
UTM Coordinates:	557.392 km Easting • 4359.489 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.

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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
Combustion Sources					
Unit B1	Stack1	Harrison Unit 1	1972	6325 MMBtu/hr (nominal)	ESP-1, FGD-1, SCR-1, LNB
Unit B2	Stack2	Harrison Unit 2	1973	6325 MMBtu/hr (nominal)	ESP-2, FGD-2, SCR-2, LNB
Unit B3	Stack3	Harrison Unit 3	1974	6325 MMBtu/hr (nominal)	ESP-3, FGD-3, SCR-3, LNB
Boiler 1A	Aux Boiler Stack	Auxiliary Boiler A	1972	202.2 MMBtu/hr	N/A
Aux Blr PB	Aux Boiler Stack	Auxiliary Boiler B	1972	202.2 MMBtu/hr	N/A
EDG1	EDG1	Emergency Diesel Generator No. 1 (Caterpillar D399TA)	1971	1341 HP/800 kW	N/A
EDG2	EDG2	Emergency Diesel Generator No. 2 (Caterpillar D399TA)	1971	1341 HP/800 kW	N/A
EDG3	EDG3	Emergency Diesel Generator No. 3 (Caterpillar 3406)	1994	470 HP/350 kW	N/A
EG-1	EG-1	Wetlands Pump House Emergency LPG Generator (Kohler 100REZGD 4SLB)	2012	145 hp/108.2 kW	N/A
EG-2	EG-2	Leachate Collection/Conveyance System Emergency LPG Generator (Kohler 400REZXB 4SRB)	2019	605 bhp	N/A
FP-01	FP-01	Emergency Diesel Fire Pump (Clarke JX6H-UFAD60)	2019	510 bhp	N/A
FP-02	FP-02	Emergency Diesel Fire Pump (Cummins NTC335)	1971	335 bhp	N/A
Control Devices					
ESP-1	ESP-1	Dry Plate Electrostatic Precipitator	1972	2.26x10 ⁶ ACFM	FGD-1
ESP-2	ESP-2	Dry Plate Electrostatic Precipitator	1973	2.26x10 ⁶ ACFM	FGD-2
ESP-3	ESP-3	Dry Plate Electrostatic Precipitator	1974	2.26x10 ⁶ ACFM	FGD-3
FGD-1	FGD-1	Wet Scrubbing System for Stack1 (105,000 gpm)	1994	2.26x10 ⁶ ACFM	SCR-1
FGD-2	FGD-2	Wet Scrubbing System for Stack2 (105,000 gpm)	1995	2.26x10 ⁶ ACFM	SCR-2
FGD-3	FGD-3	Wet Scrubbing System for Stack3 (105,000 gpm)	1995	2.26x10 ⁶ ACFM	SCR-3
SCR-1	SCR-1	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A
SCR-2	SCR-2	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A
SCR-3	SCR-3	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A
Material Handling Sources					

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
LRCH	LRCH	Lime Rail Car Unloading Hoppers	1994	380 TPH / 627,546 TPY	6ca, 6cb, 6cc, 6cd
6si, 6sj	6si, 6sj	Lime Unloading Conveyor and Transfer Points	1994	450 TPH ea. / 627,546 TPY ea.	6ca, 6cb, 6cc
8sa, 8sb	8sa, 8sb	Lime Transfer Conveyors with Associated Dribble Conveyors	1994	450 TPH ea. / 627,546 TPY ea.	8c
8sg, 8sh	8sg, 8sh	Lime Storage Conveyors with Associated Dribble Conveyors	1994	900 TPH ea. / 627,546 TPY ea.	8c
13	13	Lime Storage Silo (101,788 Tons)	1994	313,773 TPY	9c
14	14	Lime Storage Silo (101,788 Tons)	1994	313,773 TPY	10c
37u, 37Au, 38u	37u, 37Au, 38u	Hydrated Lime Pneumatic Delivery Conveyors (from trucks)	2022	70,250 YPY	Full Enclosure
37	37	DSI Lime Storage Silo 1	1994	150 Tons	37c
37A	37A	DSI Lime Storage Silo 2	1994	150 Tons	37Ac
38	38	DSI Lime Storage Silo 3	1994	150 Tons	38c
37pc, 37Apc, 38pc	37pc, 37Apc, 38pc	DSI Pneumatic Delivery Conveyors	2022	2.67 TPH (each)	Full Enclosure
24v, 25v, 26v, 27v	24v, 25v, 26v, 27v	Ball-Mill Delivery Screw Conveyors	1994	30 TPH ea./ 262,800 TPY ea.	Full Enclosure
24s, 25s, 26s, 27s	24s, 25s, 26s, 27s	Ball-Mill Slakers	1994	30 TPH ea./ 262,800 TPY ea.	24c, 25c, 26c, 27c
15va, 16va, 17va	15va, 16va, 17va	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from Lime Crushers	1994	25 TPH	Full Enclosure
15vb, 16vb, 17vb	15vb, 16vb, 17vb	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from trucks	1994	25 TPH	Full Enclosure
33	33	Solid Waste Processing Lime Silo	1994	388 Tons	15c
34	34	Solid Waste Processing Lime Silo	1994	388 Tons	16c
35	35	Solid Waste Processing Lime Silo	1994	388 Tons	17c
18va, 19va, 20va	18va, 19va, 20va	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from Fly Ash Silos	1994	120 TPH	Full Enclosure
18vb, 19vb, 20vb	18vb, 19vb, 20vb	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from trucks	1994	120 TPH	Full Enclosure
21	21	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	18c
22	22	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	19c
23	23	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	20c
21va, 22va, 23va	21va, 22va, 23va	Solid Waste Processing Fly Ash Screw Conveyors	1994	70 TPH	Full Enclosure
21vb, 22vb, 23vb	21vb, 22vb, 23vb	Solid Waste Processing Lime Screw Conveyors	1994	10 TPH	Full Enclosure

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
21vc, 22vc, 23vc	21vc, 22vc, 23vc	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
21vd, 22vd, 23vd	21vd, 22vd, 23vd	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
37v, 38v	37v, 38v	Centrifuge Cake Screw Conveyors	1994	150 TPH	Full Enclosure
21s	21s	Solid Waste Processing Pug Mill	1994	600 TPH	21c
22s	22s	Solid Waste Processing Pug Mill	1994	600 TPH	22c
23s	23s	Solid Waste Processing Pug Mill	1994	600 TPH	23c
RCCD	RCCD	Rail Car Coal Dumpers	1971	1500 TPH	Water Spray
ST-1	ST-1	Coal Stockpile	1971	1,000,000 Tons	Water Spray
ST-2	ST-2	Ash Disposal Areas	1971	64,320,000 Tons	Water Spray
BH Conv	BH Conv	Boiler House Conveyors (S-1a/b, S-2a/b, S-3a/b, C-5a/b, C-6a/b)	1971	1500 TPH	Partial Enclosure
C-12	C-12	Conveyor from Surge Bin to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-1	C-1	Conveyor from Crusher House to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-3a/b	C-3a/b	Conveyor From Coal Reclaim to Crusher House Transfer Bin	1971	1500 TPH	Partial Enclosure
C-4a/b	C-4a/b	Conveyor From Crusher House to Boiler House Conveyors	1971	1500 TPH	Partial Enclosure
RC-7	RC-7	Conveyor From Rail Dumper to RC-8	1971	1500 TPH	Partial Enclosure
RC-8	RC-8	Conveyor From RC-7 to Crusher House	1971	1500 TPH	Partial Enclosure
MC-7	MC-7	Conveyor From Mine to Crusher House	1971	1500 TPH	Partial Enclosure
C-2b	C-2b	Conveyor From Chute to Lowering Well #1	1971	800 TPH	Partial Enclosure
C-10	C-10	Internal Crusher House Conveyor to Surge Bin	1971	1500 TPH	Partial Enclosure
C-11	C-11	Internal Crusher House Conveyor from Surge Bin	1979	1500 TPH	Partial Enclosure
CRU-01	CRU-01	Coal Crusher	1971	1500 TPH	Full Enclosure, Water Spray
CRU-02	CRU-02	Coal Crusher	1972	1500 TPH	Full Enclosure, Water Spray
CRU-03	CRU-03	Coal Crusher	1977	1500 TPH	Full Enclosure, Water Spray
UR-1	UR-1	Urea Storage Silos (4)	2003	25 TPH (each)	28c, 29c, 30c, 31c
UR-2	UR-2	Urea Feed Hoppers (2)	2003	16 TPH (each)	32c, 33c
RDRU	EP-1	Rapid Discharge Rail Unloader to Belt Feeder	To be installed	3,000 TPH	Chemical Fogging System (CFS)
BF-01	EP-2	72" Unloading Belt Feeder	To be installed	3,000 TPH	Enclosure/CFS
CV-01	EP-3	54" Load -out Conveyor	To be installed	3,000 TPH	Enclosure/CFS
CV-02	EP-4	60"Conveyor	To be installed	3,000 TPH	Enclosure/CFS

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
CV-03	EP-5	48" Conveyor (to Transfer Tower)	To be installed	3,000 TPH	Enclosure/CFS
CV-04	EP-6	60" Conveyor (Stacking Tubes)	To be installed	3,000 TPH	Enclosure/CFS
ST-003	EP-7	Stacking Tube/Coal Pile/Bulldozing	To be installed	3,000 TPH	None
RC 3100	1E	Pug Mill Mixer	2016	1,500 TPH	FE
RC 3200	2E	S-Sorb Day Bin	2016	15 ton	⁽¹⁾ Bin Vent Filter/FE
RC 3500	3E	MerSorb Storage Tank	2016	6,100 gallons	FE
RC 3700	4E	MerSorb Day Storage Tank	2016	405 gallon	FE
RC 8200	5E	S-Sorb Storage Silo	2016	150 tons	⁽²⁾ Bin Vent Filter
RC 8300	6E	S-Sorb Storage Silo	2016	150 tons	⁽²⁾ Bin Vent Filter
PHaul	PHaul	Existing paved facility roadways	N/A	N/A	Water Truck

Control Devices

6ca, 6cb, 6cc	6ca, 6cb, 6cc	Fabric Filter Baghouse	1994	175,000 CFM	N/A
6cd	6cd	Vacuum System	1994	947 CFM	N/A
8c	8c	Fabric Filter Baghouse	1994	28,000 CFM	N/A
9c	9c	Fabric Filter Baghouse	1994	10,000 CFM	N/A
10c	10c	Fabric Filter Baghouse	1994	10,000 CFM	N/A
37c	37e	Bin Vent Dust Collector	2022	1500 ACFM	N/A
37Ac	37Ae	Bin Vent Dust Collector	2022	1500 ACFM	N/A
38c	38e	Bin Vent Dust Collector	2022	1500 ACFM	N/A
13c	13c	Fabric Filter Baghouse	1994	600 CFM	N/A
14c	14c	Fabric Filter Baghouse	1994	600 CFM	N/A
15c	15c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
16c	16c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
17c	17c	Fabric Filter Baghouse	1994	2,700 CFM	N/A
18c	18c	Fabric Filter Baghouse	1994	6,400 CFM	N/A
19c	19c	Fabric Filter Baghouse	1994	6,400 CFM	N/A
20c	20c	Fabric Filter Baghouse	1994	6,400 CFM	N/A
21c	21c	Wet Scrubber	1994	2,000 CFM	N/A
22c	22c	Wet Scrubber	1994	2,000 CFM	N/A
23c	23c	Wet Scrubber	1994	2,000 CFM	N/A
24c	24c	Wet Scrubber	1994	1,000 CFM	N/A
25c	25c	Wet Scrubber	1994	1,000 CFM	N/A
26c	26c	Wet Scrubber	1994	1,000 CFM	N/A
27c	27c	Wet Scrubber	1994	1,000 CFM	N/A
28c	28c	Fabric Filter Baghouse	1994	655 CFM	N/A
29c	29c	Fabric Filter Baghouse	1994	655 CFM	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
30c	30c	Fabric Filter Baghouse	1994	655 CFM	N/A
31c	31c	Fabric Filter Baghouse	1994	655 CFM	N/A
32c	32c	Fabric Filter Baghouse	1994	655 CFM	N/A
33c	33c	Fabric Filter Baghouse	1994	655 CFM	N/A
34c	34c	Fabric Filter Baghouse	1994	655 CFM	N/A
35c	35c	Fabric Filter Baghouse	1994	655 CFM	N/A
36c	36c	Fabric Filter Baghouse	1994	655 CFM	N/A

Miscellaneous Sources

COOL-01	Cooling Towers (2)	Natural Draft Cooling Towers (2)	1971	585,000 gpm	N/A
PVR	Paved Roads	Plant Paved Roads	N/A	N/A	N/A
UPVR	Unpaved Roads	Plant Unpaved Roads	N/A	N/A	N/A
U2HN	U2HN	Underground Gasoline Storage Tank	1990	2000 gallons	N/A
WASTE-WATER	Harrison Wastewater Operations	Harrison Wastewater Treatment Operations (Insignificant Activity)	N/A	6,084.55 MMgal/year	N/A
A53HN	A53HN	Dozer Fuel Oil Storage Tank	1990	12,000 gallons	N/A
Insig Tanks	N/A	Insignificant Storage Tanks (Insignificant Activity)	N/A	N/A	N/A
T01	T01	Propane Storage/Feed Tank	2012	1000 gallons	N/A
T02	T02	Propane Storage/Feed Tank	2012	1000 gallons	N/A

- (1) Passive Bin Vent MAC 39AVSC25. Total Area of Filter Media: 900 ft². Filter Efficiency: 99.92%.
(2) Passive Bin Vent C&W CP-LPR-8-S. Total Filtration Area 356 ft². Number of filter cartridges: 8. Minimum Design Efficiency: 99.99%.

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
R13-1477C	November 4, 2021
R13-2988B	August 10, 2016
G60-D049B	November 25, 2019

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 other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). 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	NSPS	New Source Performance
CBI	Confidential Business Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations		
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant		
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
m	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
mm	Million	USEPA	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour	UTM	Universal Transverse Mercator
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	VEE	Visual Emissions Evaluation
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

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§30-2.40]

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. Reserved

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.]

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)(15)]
- 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 Particulate Matter Control.** 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§2-5.1.]

- 3.1.10. **CSAPR NO_x Annual Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.406; 45CSR43]

- 3.1.11. **CSAPR NO_x Ozone Season Group 2 Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.806; 45CSR43]

- 3.1.12. **CSAPR SO₂ Group 1 Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.606; 45CSR43]

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. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 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 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)(15-16) 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, R13-2988 §4.3.1.; G60-D049 General Permit Registration and G60-D, condition 4.2.1, (EG-1, EG-2, FP-01)]

- 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 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.]

3.5. 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:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

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

- 3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8. [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. Reserved.

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. Reserved.
 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 email. 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. 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.

45CSR5	Pursuant to 45CSR5, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR5. 45CSR2 is applicable to the facility.
45CSR17	Pursuant to 45CSR17, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR17. 45CSR2 is applicable to the facility.
45CSR27	Although this facility has emissions of Toxic Air Pollutants in excess of the thresholds listed in 45CSR27 Table A, it does not meet the definition of a Chemical Processing Unit. There is not an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants. Therefore the facility is not subject to the requirements of Rule 27.
40 CFR. 60 Subpart D	Harrison Power Station boilers (B1, B2, & B3) commenced construction prior to August 17, 1971.
40 CFR Part 60 Subpart Da	Harrison Power Station boilers (B1, B2, & B3) commenced construction prior to September 18, 1978.
40 CFR Part 60 Subpart Db	Harrison Power Station Auxiliary boilers (A & B) commenced construction prior to June 19, 1984.
40 CFR Part 60 Subpart K	Harrison Power Station does not have any tanks storing petroleum liquids (as defined in 40 CFR §60.111) that were constructed after June 11, 1973, and prior to May 19, 1978 and exceed 40,000 gallons in capacity.
40 CFR Part 60 Subpart Ka	Harrison Power Station does not have any tanks storing petroleum liquids (as defined in 40 CFR §60.111a) that were constructed after May 18, 1978 and exceed 40,000 gallons in capacity.
40 CFR Part 60 Subpart Kb	Harrison Power Station does not have any tanks that were constructed after July 23, 1984 that (a) exceed 75m ³ (19,813 gal) in capacity and store volatile organic liquids (as defined in 40 CFR §60.111b) with a maximum true vapor pressure greater than 15.0 kPa (2.18 psia) or (b) exceed 151m ³ (39,864 gal) in capacity and store a volatile organic liquids with a maximum true vapor pressure greater than 3.5 kPa (0.51 psia)
40 CFR 63 Subpart Q	The existing Cooling Towers do not use any chromium based water treatment chemicals and therefore, are exempt from the referenced regulation.

40 CFR Part 60
Subpart OOO

The definition of limestone states that it is a sedimentary rock consisting of at least 80% calcium or magnesium carbonates. Lime is defined as calcium oxide, which can be produced by subjecting calcium carbonate to high temperature baking in kilns to drive off carbon dioxide. Therefore, lime is not equivalent to limestone and the Harrison lime handling operation is not subject to Subpart OOO.

4.0 Boilers [emission point ID(s): *Stack1, Stack2, Stack3, Aux Boiler Stack 1A, Aux Boiler Stack PB*]

4.1. Limitations and Standards

Particulate Matter

4.1.1. Emissions of smoke and/or particulate matter from each stack shall not exceed 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 (Condition 4.1.1 of this permit) shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and as described in the approved monitoring plan. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

Method 9 testing for the Boilers *Aux Boiler Stack 1A* and *Aux Boiler Stack PB* shall not be required if the Permittee does not burn oil in these Boilers during the calendar month. However, the permittee must keep records of hours of operation of the boilers as well as records of fuel usage for these boilers during months that oil is not burned as fuel.

[45CSR§2-3.2 and 8.4.2., 45CSR§2A-6, 45CSR§2-8.3.3.]

4.1.3. Particulate matter emissions (Stack1, Stack2, and Stack3):

a. Particulate matter emissions from each stack (Stack1, Stack2, and Stack3) shall not exceed 316.25 lb/hr.
[45CSR§2-4.1.1.]

b. **Filterable Particulate Matter (PM) Emission Limitation for 40 CFR 63 Subpart UUUUU.** If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory, for filterable particulate matter (PM), except as provided under 40 CFR §63.10009, before July 6, 2027, you must meet the emission limit in Table 2 of Subpart UUUUU of 0.030 lb/MMBtu or 0.30 lb/MWh, by collecting a minimum of 1 dscm per run with the test methods in Table 5 to Subpart UUUUU. On or after July 6, 2027, you must meet the emission limit in Table 2 of Subpart UUUUU of 0.010 lb/MMBtu or 0.10 lb/MWh, by collecting a minimum catch of 6.0 milligrams or a minimum sample volume of 4 dscm per run with the test methods in Table 5 to Subpart UUUUU.

[45CSR34; 40 CFR §63.9991(a)(1), Table 2, Item #1.a.; 40 CFR §63.10000(a)]

4.1.4. Particulate matter emissions from each auxiliary boiler stack (*Aux Boiler Stack 1A, Aux Boiler Stack PB*) shall not exceed 36.40 lb/hr.

[45CSR§2-4.1.2.]

4.1.5. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary.

[45CSR§2-4.4.]

4.1.6. Compliance with the visible emission limit shall be demonstrated by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Secretary. Compliance with the weight emission limit shall be demonstrated by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix to

45CSR2 or other equivalent EPA approved method approved by the Secretary. Such testing shall be conducted at a frequency to be established by the Secretary.

[45CSR§2-8.1.1.]

Note: An alternative monitoring method has been granted in the attached approved Monitoring Plan.

4.1.7. Compliance with the visible emissions limit shall be monitored as set forth in the approved monitoring plan (attached in Appendix A) for each emission unit.

[45CSR§2-8.2.1.]

4.1.8. Records of monitored data established in the monitoring plan shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request.

[45CSR§2-8.3.1.]

4.1.9. 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 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§2-8.3.2, 45CSR2A]

4.1.10. Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit, 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.

[45CSR§2-8.3.3.]

4.1.11. Any fuel burning unit(s) including 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.]

4.1.12. Unit B1, Unit B2, and Unit B3 shall not be operated without a flue gas desulfurization system (scrubber).

[45CSR§30-12.7]

Sulfur Dioxide (SO₂)

4.1.13. Sulfur dioxide emissions from each stack (*Stack1, Stack2 & Stack3*) shall not exceed 32,384 lb/hr.

[45CSR§10-3.3.1.]

4.1.14. Sulfur dioxide emissions from each auxiliary stack (*Aux Boiler Stack 1A and Aux Boiler Stack PB*) shall not exceed 1,294.08 lb/hr.

[45CSR§10-3.3.6.]

4.1.15. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units 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, 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.] (*Stack1, Stack2 & Stack3*)

Acid Rain Program

4.1.16. Unit B1, Unit B2, and Unit B3 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 CFR § 72.6, and as such are required to meet the requirements of 40 CFR §§ 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to:

- a. Hold an Acid Rain permit (Acid Rain Permit is included in Appendix C);
- b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
- c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
- d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
- e. Comply with the monitoring requirements of 40 CFR Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
- f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

[45CSR33, 40 CFR Parts 72, 73, 74, 75, 76, 77, 78.]

40 CFR 63, Subpart UUUUU Requirements for Unit B1, Unit B2 and Unit B3 (Conditions 4.1.17. through 4.1.34.)

4.1.17. **Hydrogen Chloride (HCL) Emission Limitation for 40 CFR 63 Subpart UUUUU.** If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory complying with the Hydrogen Chloride (HCL) limit, you must meet the emission limit in Table 2 to Subpart UUUUU of 0.002 lb/MMBtu or 0.02 lb/MWh, using the following requirements, as appropriate and limitations with the test methods in Table 5 to Subpart UUUUU except as provided under 40 CFR §63.10009;

- a. For Method 26A at appendix A-8 to 40 CFR Part 60, collect a minimum of 0.75 dscm per run;
- b. For Method 26, collect a minimum of 120 liters per run.
- c. For ASTM D6348-03 or Method 320 at appendix A to 40 CFR Part 63, sample for a minimum of 1 hour.

[45CSR34; 40 CFR §63.9991(a)(1), Table 2, Item #1.b.; 40 CFR §63.10000(a)]

4.1.18. **Mercury (Hg) Emission Limitation for 40 CFR 63 Subpart UUUUU.** If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory, for mercury (Hg), you must meet the emission limit in Table 2 to Subpart UUUUU of 1.2 lb/TBtu, or 0.013 lb/GWh using the following requirements, as appropriate and limitations with the test methods in Table 5 to Subpart UUUUU except as provided under 40 CFR §63.10009:

- a. LEE Testing for 30 days with a sampling period consistent with that given in section 5.2.1 of appendix A to 40 CFR 63 Subpart UUUUU per Method 30B at Appendix A-8 to 40 CFR part 60, or
- b. Hg CEMS or
- c. Sorbent trap monitoring system only.

[45CSR34; 40 CFR §63.9991(a)(1), Table 2, Item #1.c.; 40 CFR §63.10000(a)]

- 4.1.19. **Tune-up Work Practice Standard for 40 CFR 63 Subpart UUUUU.** If your EGU is an existing EGU, you must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, as specified in 40 CFR §63.10021(e).

Conduct periodic performance tune-ups of your EGU(s), as specified in paragraphs a through i of this condition. You must perform an inspection of the burner at least once every 36 calendar months unless your EGU employs neural network combustion optimization during normal operations in which case you must perform an inspection of the burner and combustion controls at least once every 48 calendar months. If your EGU is offline when a deadline to perform the tune-up passes, you shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit.

- a. As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows:
 - 1. Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within 3 calendar months after the burner inspection,
 - 2. Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator;
- b. As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type;
- c. As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors;
- d. As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors;
- e. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O₂ probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary;

- f. Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles;
- g. While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen in volume percent, before and after the tune-up 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). You may use portable CO, NO_x and O₂ monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system.
- h. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (1) through (9) of 40 CFR §63.10021(e) including:
 - 1. The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems;
 - 2. A description of any corrective actions taken as a part of the combustion adjustment; and
 - 3. The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and.
- i. Report the tune-up date electronically in your quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63 Subpart UUUUU. The tune-up report date is the date when tune-up requirements in paragraphs f. and g. of this condition are completed.

[45CSR34; 40 CFR §63.9991(a)(1), Table 3, Item #1; 40 CFR §§63.10021(e)(1) through (9); 40 CFR §63.10021(a), Table 7, Item #5; 40 CFR §63.10000(e); 40 CFR §63.10006(i)(1)]

4.1.20. Startup Work Practice Standard for 40 CFR 63 Subpart UUUUU. During EGU startup you must comply with the following applicable work practice standards in Table 3 to Subpart UUUUU

- a. You must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, you must use clean fuels as defined in §63.10042 for ignition. Once you convert to firing coal, residual oil, or solid oil-derived fuel, you must engage all of the applicable control technologies except dry scrubber and SCR. You must start your dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. You must comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in this subpart. You must

keep records during startup periods. You must provide reports concerning activities and startup periods, as specified in §63.10021(h) and (i).

- b. You must collect monitoring data during startup periods, as specified in §63.10020(a). You must keep records during startup periods, as provided in §§63.10021(h) and 63.10032. You must provide reports concerning activities and startup periods, as specified in §§63.10021(i), and 63.10031.

[45CSR34; 40 CFR §63.9991(a)(1), Table 3, Items 3a.(1). & 3d.; 40 CFR §63.10021(a), Table 7, Item #6; 40 CFR §63.10000(a)]

- 4.1.21. **Shutdown Work Practice Standard for 40 CFR 63 Subpart UUUUU.** You must operate all CMS during shutdown. You must also collect appropriate data, and you must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used.

While firing coal, residual oil, or solid oil-derived fuel during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, you must operate your controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than 40 CFR 63 Subpart UUUUU and that require operation of the control devices.

If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in §63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.

You must comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time you must meet this work practice. You must collect monitoring data during shutdown periods, as specified in §63.10020(a). You must keep records during shutdown periods, as provided in §§63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. You must provide reports concerning activities and shutdown periods, as specified in §§63.10021(i), and 63.10031.

[45CSR34; 40 CFR §63.9991(a)(1), Table 3, Item #4; 40 CFR §63.10021(a), Table 7, Item #7; 40 CFR §63.10000(a)]

- 4.1.22. 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 EPA 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 §63.10000(b)]

- 4.1.23. You may use emissions averaging as described in paragraph (a)(2) of 40 CFR §63.10009 as an alternative to meeting the requirements of §63.9991 for filterable PM, HCl, or Hg on an EGU-specific basis if:

- a. You have more than one existing EGU in the same subcategory located at one or more contiguous properties, belonging to a single major industrial grouping, which are under common control of the same person (or persons under common control); and
- b. You use CEMS (or sorbent trap monitoring systems for determining Hg emissions) or quarterly emissions testing for demonstrating compliance.

[45CSR34; 40 CFR §63.10009(a)(1)]

- 4.1.24. You may demonstrate compliance by emissions averaging among the existing EGUs in the same subcategory, if your averaged Hg emissions for EGUs in the “unit designed for coal $\geq 8,300$ Btu/lb” subcategory are equal to or less than 1.2 lb/TBtu or $1.3E-2$ lb/GWh on a 30-boiler operating day basis or if your averaged emissions of individual, other pollutants from other subcategories of such EGUs are equal to or less than the applicable emissions limit in Table 2 to 40 CFR 63 Subpart UUUUU, according to the procedures in 40 CFR §63.10009. Note that except for the alternate Hg emissions limit from EGUs in the “unit designed for coal $\geq 8,300$ Btu/lb” subcategory, the averaging time for emissions averaging for pollutants is 30-group boiler operating days (rolling daily) using data from CEMS and sorbent trap monitoring (for Hg), or a combination of data from CEMS and emissions testing (for other pollutants). The averaging time for emissions averaging for the alternate Hg limit (equal to or less than 1.0 lb/TBtu or $1.1E-2$ lb/GWh) from EGUs in the “unit designed for coal $\geq 8,300$ Btu/lb” subcategory is 90-group boiler operating days (rolling daily) using data from CEMS, sorbent trap monitoring, or a combination of data from CEMS and sorbent trap monitoring. For the purposes of this paragraph, 30- (or 90-) group boiler operating days is defined as a period during which at least one unit in the emissions averaging group operates on each of the 30 or 90 days. You must calculate the weighted average emissions rate for the group in accordance with the procedures in 40 CFR §63.1009(a)(2) using the data from all units in the group including any that operate fewer than 30 (or 90) of the preceding 30- (or 90-) group boiler operating days.
 - a. You may choose to have your EGU emissions averaging group meet either the heat input basis (MMBtu or TBtu, as appropriate for the pollutant) or gross output basis (MWh or GWh, as appropriate for the pollutant).
 - b. You may not mix bases within your EGU emissions averaging group.

[45CSR34; 40 CFR §§63.10009(a)(2)(i) and (ii)]

- 4.1.25. Use the following equations when performing calculations for your EGU emissions averaging group:

Weighted 30-boiler operating day rolling average emissions rate equations. Use Equation 2a or 2b of this section to calculate the 30 day rolling average emissions daily.

$$WAER = \frac{\sum_{i=1}^p [\sum_{i=1}^n (Her_i \times Rm_i)]_p + \sum_{i=1}^m (Ter_i \times Rt_i)}{\sum_{i=1}^p [\sum_{i=1}^n (Rm_i)]_p + \sum_{i=1}^m Rt_i} \quad (Eq. 2a)$$

Where:

Her_i = hourly emission rate (e.g., lb/MMBtu, lb/MWh) from unit i's CEMS or sorbent trap monitoring system for the preceding 30-group boiler operating days,

Rm_i = hourly heat input or gross output from unit i for the preceding 30-group boiler operating days,

p = number of EGUs in emissions averaging group that rely on CEMS or sorbent trap monitoring,

n = number of hours that hourly rates are collected over 30-group boiler operating days,

Ter_i = Emissions rate from most recent emissions test of unit i in terms of lb/heat input or lb/gross output,

Rt_i = Total heat input or gross output of unit i for the preceding 30-boiler operating days, and

m = number of EGUs in emissions averaging group that rely on emissions testing.

$$WAER = \frac{\sum_{i=1}^p [\sum_{i=1}^n (Her_i \times Sm_i \times Cfm_i)]_p + \sum_{i=1}^m (Ter_i \times St_i \times Cft_i)}{\sum_{i=1}^p [\sum_{i=1}^n (Sm_i \times Cfm_i)]_p + \sum_{i=1}^m St_i \times Cft_i} \quad (Eq. 2b)$$

Where:

variables with similar names share the descriptions for Equation 2a of this section,

Sm_i = steam generation in units of pounds from unit i that uses CEMS for the preceding 30-group boiler operating days,

Cfm_i = conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses CEMS from the preceding 30 group boiler operating days,

St_i = steam generation in units of pounds from unit i that uses emissions testing, and

Cft_i = conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses emissions testing.

[45CSR34; 40 CFR §63.10009(b)(2)]

- 4.1.26. *Separate stack requirements.* For a group of two or more existing EGUs in the same subcategory that each vent to a separate stack, you may average filterable PM, HCl, or Hg emissions to demonstrate compliance with the limits in Table 2 to this subpart if you satisfy the requirements in 40 CFR §§63.10009(d) through (j).

[45CSR34; 40 CFR §63.10009(c)]

- 4.1.27. For each existing EGU in the averaging group:
- a. The emissions rate achieved during the initial performance test for the HAP being averaged must not exceed the emissions level that was being achieved 180 days after April 16, 2015, or the date on which emissions testing done to support your emissions averaging plan is complete (if the Administrator does not require submission and approval of your emissions averaging plan), or the date that you begin emissions averaging, whichever is earlier; or

- b. The control technology employed during the initial performance test must not be less than the design efficiency of the emissions control technology employed 180 days after April 16, 2015 or the date that you begin emissions averaging, whichever is earlier.

[45CSR34; 40 CFR §63.10009(d)]

- 4.1.28. The weighted-average emissions rate from the existing EGUs participating in the emissions averaging option must be in compliance with the limits in Table 2 to this subpart at all times following the date that you begin emissions averaging.

[45CSR34; 40 CFR §63.10009(e)]

- 4.1.29. You must determine the weighted average emissions rate in units of the applicable emissions limit on a 30 group boiler operating day rolling average basis according to paragraphs (g)(1) and (2) of 40 CFR §63.10009.

- a. You must use Equation 2a of paragraph (b) of 40 CFR §63.10009 to calculate the weighted average emissions rate using the actual heat input or gross output for each existing unit participating in the emissions averaging option.
- b. If you are not capable of monitoring heat input or gross output, you may use Equation 2b of paragraph (b) of 40 CFR §63.10009 as an alternative to using Equation 2a of paragraph (b) of 40 CFR §63.10009 to calculate the average weighted emission rate using the actual steam generation from the units participating in the emissions averaging option.

[45CSR34; 40 CFR §63.10009(g)]

- 4.1.30. *CEMS (or sorbent trap monitoring) use.* If an EGU in your emissions averaging group uses CEMS (or a sorbent trap monitor for Hg emissions) to demonstrate compliance, you must use those data to determine the 30 group boiler operating day rolling average emissions rate.

[45CSR34; 40 CFR §63.10009(h)]

- 4.1.31. *Emissions testing.* If you use manual emissions testing to demonstrate compliance for one or more EGUs in your emissions averaging group, you must use the results from the most recent performance test to determine the 30 day rolling average. You may use CEMS or sorbent trap data in combination with data from the most recent manual performance test in calculating the 30 group boiler operating day rolling average emissions rate.

[45CSR34; 40 CFR §63.10009(i)]

- 4.1.32. *Emissions averaging plan.* You must develop an implementation plan for emissions averaging according to the procedures and requirements in 40 CFR §63.10009 (j)(1) and (2). (See Appendix D for the Averaging Plan)

[45CSR34; 40 CFR §63.10009(j)]

- 4.1.33. Fuel Requirements for startup and shutdown.

- a. You must determine the fuel whose combustion produces the least uncontrolled emissions, i.e., the cleanest fuel, either natural gas or distillate oil, that is available on site or accessible nearby for use during periods of startup or shutdown.

- b. Your cleanest fuel, either natural gas or distillate oil, for use during periods of startup or shutdown determination may take safety considerations into account.

[45CSR34; 40 CFR §63.10011(f)]

- 4.1.34. You must follow the startup or shutdown requirements as given in Table 3 to 40 CFR 63 Subpart UUUUU for each coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGU.
 - a. You may use the diluent cap and default gross output values, as described in §63.10007(f), during startup periods or shutdown periods.
 - b. You must operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods.

[45CSR34; 40 CFR §63.10021(h)]

- 4.1.35. **Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD:**

- a. You must conduct an annual tune-up of the natural gas/oil fired auxiliary boilers (*Boiler 1A and AuxBlr PB*) to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR §63.7540 (paragraphs 1. through 6. of this condition). You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 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.
 - 1. 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). 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;
 - 2. 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;
 - 3. 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);
 - 4. 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;
 - 5. 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

6. Maintain on-site and submit, if requested by the Administrator, a report containing the following information,
 - (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; 40 CFR §63.7500(a)(1) and Table 3 Item #3, 40 CFR §§63.7505(a), 63.7515(d), 63.7540(a)(10), 63.7540(a)(13)]

- b. At all times, you must operate and maintain auxiliary boilers *Boiler 1A and AuxBlr PB*, 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 CFR §63.7500(a)(3)]

4.2. Monitoring Requirements

- 4.2.1. Compliance with the visible emission requirements for *Stack1, Stack2 & Stack3, Aux Boiler Stack 1A, and Aux Boiler Stack PB* shall be determined as outlined in section I.A. of the *Revision 3* “Monitoring and Recordkeeping Plan 45CSR2 and 45CSR10” which is attached in Appendix A of this permit.

Method 9 testing for *Aux Boiler Stack 1A* and *Aux Boiler Stack PB* shall not be required if the Permittee does not burn oil in these Boilers during the calendar month. However, the permittee must keep records of hours of operation of the boilers as well as records of fuel usage fuel for these boilers during months that oil is not burned as fuel.

[45CSR§§2-3.2, 8.2, and 8.4.2.]

- 4.2.2. The Electrostatic Precipitator (ESP) secondary voltage and secondary current shall be measured continuously using a voltmeter and ammeter integrated into the ESP Unit, and both shall be recorded no less than four times per hour, equally spaced over each hour. The total power (P) input to the ESP is the sum of the products of secondary voltage (V) and current (I) in each field and shall be calculated and recorded in accordance with Condition 4.4.3 of this permit. An excursion shall be defined as 3-hour block average ESP power levels below the following: Unit 1 = 127 kW, Unit 2 = 118 kW, Unit 3 = 104 kW.
[45CSR§30-5.1.c., 40 CFR § 64.3(b)(1), 40 CFR § 64.3(b)(4)(ii), and 40 CFR §64.6(c)]
- 4.2.3. The permittee shall calibrate, maintain, and operate the instrumentation used to measure the secondary voltage and secondary current in Condition 4.2.2 of this permit in accordance with manufacturer’s specifications.
[45CSR§30-5.1.c. and 40 CFR § 64.3(b)(3)]

- 4.2.4. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure all SO₂, NO_x, and CO₂ emissions from each stack liner, *Stack1*, *Stack2*, and *Stack3* as specified in 40 CFR Part 60, Subpart D and in 40 CFR Part 75.

[45CSR16, 45CSR33, 40 CFR §75.10, 40 CFR §60.45]

- 4.2.5. *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.

[40 CFR § 64.7(b) and 45CSR§30-5.1.c]

- 4.2.6. *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.

[40 CFR § 64.7(c) and 45CSR§30-5.1.c]

- 4.2.7. *Response to excursions or exceedances.*

- a. 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.
- b. 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.

[40 CFR § 64.7(d) and 45CSR§30-5.1.c]

- 4.2.8. *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.

[40 CFR § 64.7(e) and 45CSR§30-5.1.c]

- 4.2.9. The permittee is subject to the quality improvement plan (QIP) requirements of 40 CFR §64.8.

[40 CFR §64.8 and 45CSR§30-5.1.c]

40 CFR 63, Subpart UUUUU Requirements for Unit B1, Unit B2 and Unit B3 (Conditions 4.2.10. through 4.2.21.)

- 4.2.10. If you elect to (or are required to) use CEMS to continuously monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the default values in §63.10007(f) are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of 40 CFR 63 Subpart UUUUU, these default values are not considered to be substitute data.

[45CSR34; 40 CFR §63.10007(f)]

- 4.2.11. *Single unit-single stack configurations.* For an affected unit that exhausts to the atmosphere through a single, dedicated stack, you shall either install the required CEMS, PM CPMS (which on or after July 6, 2027 you may not use PM CPMS for filterable PM compliance demonstrations), and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere.

[45CSR34; 40 CFR §63.10010(a)(1)]

- 4.2.12. If you use an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. You must install, certify, maintain, and operate the CEMS according to 40 CFR Part 75. Use only quality-assured O₂ or CO₂ data in the emissions calculations; do not use part 75 substitute data values.

[45CSR34; 40 CFR §63.10010(b)]

- 4.2.13. If you are required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to 40 CFR 63 Subpart UUUUU, you must install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to 40 CFR Part 75. Use only unadjusted, quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations.

[45CSR34; 40 CFR §63.10010(c)]

- 4.2.14. If you are required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to 40 CFR 63 Subpart UUUUU, you must install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, for coal-fired units, you may use appropriate fuel-specific default moisture values from 40 CFR §75.11(b) to estimate the moisture content of the stack gas. If you install and operate a moisture monitoring system, do not use substitute moisture data in the emissions calculations.

[45CSR34; 40 CFR §63.10010(d)]

- 4.2.15. If you use a Hg CEMS or a sorbent trap monitoring system, you must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with Appendix A to 40 CFR 63 Subpart UUUUU. You must calculate and record a 30-boiler operating day rolling average Hg emission rate, in units

of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate, calculated according to section 6.2 of Appendix A to 40 CFR 63 Subpart UUUUU, is the average of all of the valid hourly Hg emission rates in the preceding 30-boiler operating days. Section 7.1.4.3 of Appendix A to 40 CFR 63 Subpart UUUUU explains how to reduce sorbent trap monitoring system data to an hourly basis.

[45CSR34; 40 CFR §63.10010(g); 40 CFR §63.10021(a), Table 7, Item #1]

- 4.2.16. You must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments, and any scheduled maintenance as defined in your site-specific monitoring plan. You are required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

[45CSR34; 40 CFR §§63.10020(a) and (b)]

- 4.2.17. You may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in 40 CFR §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. You must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system.

[45CSR34; 40 CFR §§63.10020(a) and (c)]

- 4.2.18. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements.

[45CSR34; 40 CFR §§63.10020(a) and (d)]

- 4.2.19. Except as otherwise provided in §63.10020(c), if you use a CEMS to measure SO₂, PM, HCl, HF, or Hg emissions, or using a sorbent trap monitoring system to measure Hg emissions, you must demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO₂, O₂, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 in 40 CFR §63.10021(b) to determine the 30-boiler operating day rolling average.

$$\text{Boiler operating day average} = \frac{\sum_{i=1}^n Her_i}{n} \quad (\text{Eq. 8})$$

Where:

Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30-boiler operating days.

[45CSR34; 40 CFR §63.10021(b)]

4.2.20. The owner or operator must demonstrate compliance with 40 CFR 63 Subpart UUUUU on a continuous basis by meeting the following requirements:

- a. For each 30-day rolling average period, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in 40 CFR §63.10009(f) and (g);
- b. For each existing EGU participating in the emissions averaging option, operate in accordance with the startup or shutdown work practice requirements given in Table 3 to 40 CFR 63 Subpart UUUUU

[45CSR34; 40 CFR §§63.10022(a)(1) and (a)(4)]

4.2.21. Any instance where the owner or operator fails to comply with the continuous monitoring requirements in condition 4.2.20. is a deviation.

[45CSR34; 40 CFR §63.10022(b)]

4.3. Testing Requirements

4.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit B1, Unit B2 and Unit B3 with the particulate matter weight emission standards (in lbs/hr). 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 methods approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table. Compliance tests were performed on March 5, 2024, for Unit B1, January 23, 2024, for Unit B2 and August 5, 2025, for Unit B3 and resulted in mass emission rates less than 50% of the weight emission standard for each unit. Therefore, the retesting frequency is “Once/3 years” and subsequent testing shall be based on the schedule below.

Test	Test Results	Retesting Frequency
Annual	after three successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates $< 80\%$ of weight emission standard	Once/2 years
Annual	any tests indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Once/2 years	any tests indicates a mass emission rate $< 80\%$ of weight emission standard	Once/2 years
Once/2 years	any tests indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual
Once/3 years	any tests indicates a mass emission rate $\leq 50\%$ 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

Test	Test Results	Retesting Frequency
Once/3 years	any test indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual

[45CSR§2-8.1., 45CSR§2A-5.2.]

40 CFR 63, Subpart UUUUU Requirements for Unit B1, Unit B2 and Unit B3 (Conditions 4.3.2. through 4.3.15.)

4.3.2. You must conduct all applicable periodic emissions tests for filterable PM emissions according to Table 5 to 40 CFR 63 Subpart UUUUU, 40 CFR §63.10007, and 40 CFR §63.10000(c), except as otherwise provided in 40 CFR §63.10021(d)(1).

[45CSR34; 40 CFR §63.10006(c)]

4.3.3. You must conduct all applicable periodic HCl emissions tests according to Table 5 to 40 CFR 63 Subpart UUUUU, and 40 CFR §63.10007 at least quarterly, except as otherwise provided in 40 CFR §63.10021(d)(1).

[45CSR34; 40 CFR §63.10006(d)]

4.3.4. *Time between performance tests. (40 CFR 63 Subpart UUUUU)*

a. Notwithstanding the provisions of 40 CFR §63.10021(d)(1), the requirements listed in 40 CFR §§63.10006 (g) and (h), and the requirements of 40 CFR §63.10006(f)(3), you must complete performance tests for your EGU at least 45 calendar days, measured from the test's end date, must separate performance tests conducted every quarter.

b. For units demonstrating compliance through quarterly emission testing, you must conduct a performance test in the 4th quarter of a calendar year if your EGU has skipped performance tests in the first 3 quarters of the calendar year.

c. If your EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, you must complete an additional performance test in that period at least 15 calendar days must separate two performance tests conducted in the same quarter.

[45CSR34; 40 CFR §§63.10006(f)(1)(i), (f)(2), and (f)(3)(i)]

4.3.5. If you elect to demonstrate compliance using emissions averaging under 40 CFR §63.10009, you must continue to conduct performance stack tests at the appropriate frequency given in 40 CFR §§63.10006(c) through (f).

[45CSR34; 40 CFR §63.10006(g)]

4.3.6. Except as otherwise provided in 40 CFR §63.10007, you must conduct all required performance tests according to 40 CFR §§63.7(d), (e), (f), and (h). You must also develop a site-specific test plan according to the requirements in 40 CFR §63.7(c).

[45CSR34; 40 CFR §63.10007(a)]

4.3.7. If you use Hg CEMS or other CEMS (to determine compliance with a 30-boiler operating day rolling average emission limit, you must collect quality-assured CEMS data for all unit operating conditions, including startup and shutdown (see 40 CFR §63.10011(g) and Table 3 to Subpart UUUUU), except as otherwise provided in 40 CFR §63.10020(b). Emission rates determined during startup periods and shutdown periods

(as defined in 40 CFR §63.10042) are not to be included in the compliance determinations, except as otherwise provided in 40 CFR §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii).

[45CSR34; 40 CFR §63.10007(a)(1)]

- 4.3.8. If you conduct performance testing with test methods in lieu of continuous monitoring, operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run.

[45CSR34; 40 CFR §63.10007(a)(2)]

- 4.3.9. You must conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap monitoring system data), and 30-boiler operating day Hg emission tests for LEE qualification) according to the requirements in Table 5 to 40 CFR 63 Subpart UUUUU.

[45CSR34; 40 CFR §63.10007(b)]

- 4.3.10. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, where the concept of test runs does not apply, you must conduct a minimum of three separate test runs for each performance test, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling time or volume specified in Table 2 to 40 CFR 63 Subpart UUUUU. 40 CFR §§63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on CEMS or sorbent trap monitoring systems, and for conducting emission tests for LEE qualification.

[45CSR34; 40 CFR §63.10007(d)]

- 4.3.11. To use the results of performance testing to determine compliance with the applicable emission limits in Table 2 to 40 CFR 63 Subpart UUUUU, proceed as in 40 CFR §§63.10007(e)(1) through (3). If you use quarterly performance testing for coal-fired EGUs to measure compliance with PM emissions limit in Table 2 to Subpart UUUUU, you demonstrate continuous compliance by calculating the results of the testing in units of the applicable emissions standard. On or after July 6, 2027, you may not use quarterly performance testing for filterable PM compliance demonstrations.

[45CSR34; 40 CFR §63.10007(e); 40 CFR §63.10021(a), Table 7, Item #4]

- 4.3.12. Upon request, you shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements of 40 CFR §63.10007.

[45CSR34; 40 CFR §63.10007(g)]

- 4.3.13. If your coal-fired EGU does not qualify as a LEE for:

- a. Before July 6, 2027, total filterable particulate matter (PM), you must demonstrate compliance through an initial performance test and you must monitor continuous performance through either use of a particulate matter continuous parametric monitoring system (PM CPMS), a PM CEMS, or, for an existing EGU, compliance performance testing repeated quarterly. On and after July 6, 2027, you may not pursue or continue to use the LEE option for your coal-fired or solid oil derived fuel-fired EGU for filterable PM or for non-mercury HAP metals. You must demonstrate compliance through an initial performance test, and you must monitor continuous performance with the applicable filterable PM emissions limit through the use of a PM CEMS or HAP metals CMS.

[45CSR34; 40 CFR §63.10000(c)(1)(iv)]

- b. Hydrogen chloride (HCl), you may demonstrate initial and continuous compliance through use of an HCl CEMS, installed and operated in accordance with Appendix B to this subpart. As an alternative to

HCl CEMS, you may demonstrate initial and continuous compliance by conducting an initial and periodic quarterly performance stack test for HCl. If your EGU uses wet or dry flue gas desulfurization technology (this includes limestone injection into a fluidized bed combustion unit), you may apply a second alternative to HCl CEMS by installing and operating a sulfur dioxide (SO₂) CEMS installed and operated in accordance with part 75 of this chapter to demonstrate compliance with the applicable SO₂ emissions limit.

[45CSR34; 40 CFR §63.10000(c)(1)(v)]

- c. If your coal-fired or solid oil-derived fuel-fired EGU does not qualify as a LEE for Hg, you must demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system, in accordance with appendix A to 40 CFR 63 Subpart UUUUU.

[45CSR34; 40 CFR §63.10000(c)(1)(vi)]

- 4.3.14. If you use quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 2 to 40 CFR 63 Subpart UUUUU, you

- a. May skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year; and
- b. Must conduct the performance test as defined in Table 5 to 40 CFR 63 Subpart UUUUU and calculate the results of the testing in units of the applicable emissions standard.

[45CSR34; 40 CFR §§63.10021(d)(1) and (d)(2)]

- 4.3.15. *Notification of performance test.* When you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. *Compliance with this requirement ensures compliance with 40 CFR §§63.7(b) and 63.9(e).*

[45CSR34; 40 CFR §63.10030(a) and (d); 40 CFR §§63.7(b) and 63.9(e)]

4.4. Recordkeeping Requirements

- 4.4.1. 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 Condition 4.2.1 of this permit. 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§2-8.3.1.]

- 4.4.2. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit as outlined in “45CSR2 Monitoring Plan” attached as Appendix A of this permit. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.3.]

- 4.4.3. The total secondary Electrostatic Precipitator power input (in kW) shall be calculated and recorded no less than four times per hour, equally spaced over each hour, in an electronic data acquisition system and averaged on a 3 hour block basis.

[45CSR§30-5.1.c. and 40 CFR 64.9(b)]

- 4.4.4. *General recordkeeping requirements.*

- a. The owner or operator shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §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).
- b. 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.

[40 CFR §64.9(b)]

40 CFR 63, Subpart UUUUU Requirements for Unit B1, Unit B2 and Unit B3 (Conditions 4.4.5. through 4.4.14.)

- 4.4.5. All records required to comply with 40 CFR 63 Subpart UUUUU shall be kept in the following form:
- 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 on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[45CSR34; 40 CFR §63.10033]

- 4.4.6. You must keep records according to a. and b. of this condition. If you are required to (or elect to) continuously monitor Hg and/or HCl and/or HF and/or PM emissions, you must also keep the records required under appendix A and/or appendix B and/or appendix C and/or appendix D to 40 CFR 63 Subpart UUUUU. If you elect to conduct periodic (e.g., quarterly or annual) performance stack tests, then, for each test completed on or after January 1, 2024, you must keep records of the applicable data elements under 40 CFR 63.7(g). You must also keep records of all data elements and other information in appendix E to 40 CFR 63 Subpart UUUUU that apply to your compliance strategy.
- a. In accordance with 40 CFR 63.10(b)(2)(xiv), a copy of each notification or report that you submit to comply with 40 CFR 63 Subpart UUUUU. You must also keep records of all supporting documentation for the initial Notifications of Compliance Status, semiannual compliance reports, or quarterly compliance reports that you submit.
 - b. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 CFR §63.10(b)(2)(viii).

[45CSR34; 40 CFR §63.10032(a)]

- 4.4.7. For each CEMS, you must keep records according to a. through d. of this condition.

- a. Records described in 40 CFR §63.10(b)(2)(vi) through (xi).
- b. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR §63.8(d)(3).
- c. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR §63.8(f)(6)(i).
- d. 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.

[45CSR34; 40 CFR §63.10032(b)]

- 4.4.8. You must keep the records required in Table 7 to 40 CFR 63 Subpart UUUUU to show continuous compliance with each emission limit and operating limit that applies to you.

[45CSR34; 40 CFR §63.10032(c), Table 7, Items #1, #4, #5, #6, #7]

- 4.4.9. For each EGU subject to an emission limit, you must also keep the records in a. and b. of this condition.
- a. You must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used.
 - b. If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), you must keep a record which documents how the fuel satisfies the requirements of the petition process.

[45CSR34; 40 CFR §63.10032(d)]

- 4.4.10. If you elect to average emissions consistent with 40 CFR §63.10009, you must additionally keep a copy of the emissions averaging implementation plan required in 40 CFR §63.10009(g), all calculations required under 40 CFR §63.10009, including daily records of heat input or steam generation, as applicable, and monitoring records consistent with 40 CFR §63.10022.

[45CSR34; 40 CFR §63.10032(e)]

- 4.4.11. You must keep records of the occurrence and duration of each startup or shutdown.

[45CSR34; 40 CFR §63.10032(f)(1)]

- 4.4.12. You must keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[45CSR34; 40 CFR §63.10032(g)]

- 4.4.13. You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.10000(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 §63.10032(h)]

4.4.14. You must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown.
[45CSR34; 40 CFR §63.10032(i)]

4.4.15. For auxiliary boilers *Boiler 1A and AuxBlr PB*, you must keep records according to paragraphs a. and b. of this condition.

- a. A copy of each notification and report that you submitted to comply with 40 CFR 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 CFR §63.10(b)(2)(xiv).
- b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR §63.10(b)(2)(viii).

[45CSR34; 40 CFR §63.7555(a)]

4.4.16. All records required to comply with 40 CFR 63 Subpart DDDDD shall be kept in the following form:

- 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 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 CFR §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[45CSR34; 40 CFR §63.7560]

4.5. Reporting Requirements

4.5.1. The designated representative shall electronically report SO₂, NO_x, and CO₂ emissions data and information as specified in 40 CFR § 75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.
[45CSR33, 40 CFR §75.64]

4.5.2. Compliance with the periodic exception reporting of permit condition 4.1.9. shall be demonstrated as outlined in “45CSR2 Monitoring Plan” attached as Appendix A of this permit.
[45CSR§2-8.3.2.]

4.5.3. 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 45CSR§2-3 and 45CSR§2-4) 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 subdivision 45CSR§2- 9.3.1 (Condition 4.5.3.a.), by telephone 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.]

4.5.4. General reporting requirements.

- a. 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).
- b. 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:
 1. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 2. 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

3. 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.

[40 CFR §64.9(a) and 45CSR§30-5.1.c]

40 CFR 63, Subpart UUUUU Requirements for Unit B1, Unit B2 and Unit B3 (Conditions 4.5.5. through 4.5.15.)

- 4.5.5. You must submit the applicable reports and notifications required under 40 CFR 63.10031(a) through (k) to the Administrator electronically, using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. If the final date of any time period (or any deadline) for any of these submissions falls on a weekend or a Federal holiday, the time period shall be extended to the next business day. Moreover, if the EPA Host System supporting the ECMPS Client Tool is offline and unavailable for submission of reports for any part of a day when a report would otherwise be due, the deadline for reporting is automatically extended until the first business day on which the system becomes available following the outage. Use of the ECMPS Client Tool to submit a report or notification required under this subpart satisfies any requirement under subpart A of 40 CFR Part 63 to submit that same report or notification (or the information contained in it) to the appropriate EPA Regional office or state agency whose delegation request has been approved.

[45CSR34; 40 CFR §63.10021(f)]

- 4.5.6. You must report each instance in which you did not meet an applicable emissions limit or operating limit in Tables 2 and 3 to 40 CFR 63 Subpart UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of 40 CFR Subpart UUUUU. These deviations must be reported according to 40 CFR §63.10031.

[45CSR34; 40 CFR §63.10021(g)]

- 4.5.7. You must submit all of the notifications in 40 CFR §63.7(c), and §63.8(e), by the dates specified.

[45CSR34; 40 CFR §63.10030(a)]

- 4.5.8. You must submit a compliance report for 40 CFR 63 Subpart UUUUU containing:

- a. Excess emissions and deviation reporting. For EGUs whose owners or operators rely on a CMS to comply with an emissions or operating limit, the semiannual compliance reports described in 40 CFR §63.10031(c), must include the excess emissions and monitor downtime summary report described in 40 CFR 63.10(e)(3)(vi). However, starting with the first calendar quarter of 2024, reporting of the information under 40 CFR 63.10(e)(3)(vi) (and under paragraph (e)(3)(v), if the applicable excess emissions and/or monitor downtime threshold is exceeded) is discontinued for all CMS, and you must, instead, include in the quarterly compliance reports described in 40 CFR §63.10031(g) the applicable data elements in section 13 of appendix E to 40 CFR 63 Subpart UUUUU for any “deviation” (as defined in 40 CFR 63.10042 and elsewhere in this Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, you must include a statement to that effect in the quarterly compliance report.
- b. Starting with a report for the first calendar quarter of 2024, you must use the ECMPS Client Tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in sections 2 through 13 of appendix E to 40 CFR 63 Subpart UUUUU. For each stack test summarized in the compliance report, you must also submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR 63 Subpart UUUUU. The

compliance reports and associated appendix E information must be submitted no later than 60 days after the end of each calendar quarter.

- c. If you are required to (or elect to) monitor Hg emissions continuously, you must meet the electronic reporting requirements of appendix A to 40 CFR Subpart UUUUU.

[45CSR34; 40 CFR §63.10031(a)(1), Table 8, Item #1; 40 CFR §63.10031(d); 40 CFR §63.10031(g)]

- 4.5.9. Quarterly compliance reports shall be submitted in accordance with 40 CFR §63.10031(g), starting with a report covering the first calendar quarter of 2024.

[45CSR34; 40 CFR §§63.10031(b)(6)]

- 4.5.10. Each affected source that has obtained a title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in 40 CR Subpart UUUUU in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to 40 CFR §§63.10031(c) and (d), or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR §63.10031(g), along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report(s) includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority

[45CSR34; 40 CFR §63.10031(e)]

- 4.5.11. For each performance stack test completed prior to January 1, 2024, (including 30- (or 90-) boiler operating day Hg LEE demonstration tests and PM tests to establish operating limits for PM CPMS), you must submit a PDF test report in accordance with 40 CFR §63.10031(f)(6), no later than 60 days after the date on which the testing is completed. For each test completed on or after January 1, 2024, in accordance with 40 CFR 63.10031(g), submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed.

[45CSR34; 40 CFR §63.10031(f)]

- 4.5.12. For each RATA of an Hg monitoring system completed prior to January 1, 2024, you must submit a PDF test report in accordance with 40 CFR §63.10031(f)(6), no later than 60 days after the date on which the test is completed. For each Hg RATA completed on or after January 1, 2024, you must submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR Subpart UUUU prior to or concurrent with the relevant quarterly emissions report.

[45CSR34; 40 CFR §63.10031(f)(1)]

- 4.5.13. You must submit semiannual compliance reports as required under 40 CFR §§63.10031(b) through (d), ending with a report covering the semiannual period from July 1 through December 31, 2023, and Notifications of Compliance Status as required under section 63.10030(e), as PDF files. Quarterly compliance reports shall be submitted in XML format thereafter, in accordance with paragraph 40 CFR §63.10031(g), starting with a report covering the first calendar quarter of 2024.

[45CSR34; 40 CFR §63.10031(f)(4)]

- 4.5.14. All reports required by 40 CFR 63 Subpart UUUUU not subject to the requirements in 40 CFR §63.10031(f) introductory text and 40 CFR §§63.10031(f)(1) through (4) must be sent to the Administrator at the appropriate address listed in 40 CFR §63.13. If acceptable to both the Administrator and the owner or operator of an EGU, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR §63.10031(f) introductory text and 40 CFR §§63.10031(f)(1) through (4) in paper format.

[45CSR34; 40 CFR §63.10031(f)(5)]

- 4.5.15. All reports and notifications described in 40 CFR §63.10031(f) introductory text, 40 CFR §§63.10031(f)(1), (2), and (4) shall be submitted to the EPA in the specified format and at the specified frequency, using the ECMPS Client Tool. Each PDF version of a stack test report, CEMS RATA report, PM CEMS correlation test report, RRA report, and RCA report must include sufficient information to assess compliance and to demonstrate that the reference method testing was done properly. Note that EPA will continue to accept, as necessary, PDF reports that are being phased out at the end of 2023, if the submission deadlines for those reports extend beyond December 31, 2023. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file:

- a. The facility name, physical address, mailing address (if different from the physical address), and county;
- b. The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID;
- c. The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System;
- d. If any of the EGUs in paragraph (f)(6)(iii) of this section share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to part 75 of this chapter, report the ID number of the common stack as it is represented in the electronic monitoring plan required under §75.53 of this chapter;
- e. If any of the EGUs described in paragraph (f)(6)(iii) of this section are in an averaging plan under §63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90-day averaging plan;
- f. The identification of each emission point to which the report applies. An “emission point” is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in paragraph (f)(6)(iii) of this section or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (*e.g.*, “Unit 2 stack,” “common stack CS001,” or “multiple stack MS001”);
- g. An indication of the type of PDF report or notification being submitted;
- h. The pollutant(s) being addressed in the report;
- i. The reporting period being covered by the report (if applicable);
- j. The relevant test method that was performed for a performance test (if applicable);
- k. The date the performance test was completed (if applicable) and the test number (if applicable); and

- l. The responsible official's name, title, and phone number.

45CSR34; 40 CFR §63.10031(f)(6)]

- 4.5.16. For auxiliary boilers *Boiler 1A and AuxBlr PB*, you must report each instance in which you did not meet each work practice standard in Table 3 to 40 CFR 63 Subpart DDDDD that apply to you. These instances are deviations from the work practice standards, in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.7550.

[45CSR34; 40 CFR §63.7540(b)]

- 4.5.17. You must submit a compliance report for 40 CFR 63 Subpart DDDDD containing:
 - a. The information in 40 CFR §63.7550(c)(5)(i) through (iii), (xiv) and (xvii), as follows:
 1. Company and Facility name and address.
 2. Process unit information, emissions limitations, and operating parameter limitations.
 3. Date of report and beginning and ending dates of the reporting period.
 4. 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 CFR §63.7540(a)(10). 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.
 5. 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. You must submit the report annually according to the requirements in 40 CFR §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 in 40 CFR §63.7495 and ending on December 31, within 1 year after the compliance date that is specified for your source in 40 CFR §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.
 5. You may submit the first and subsequent compliance reports according to the dates in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.
 - c. You must submit all reports required by Table 9 of 40 CFR 63 Subpart DDDDD 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.

[45CSR34; 40 CFR §63.7550(a), Table 9, Item # 1.a.; 40 CFR §§63.7550(b), (c)(1), (c)(5)(i) through (iii), (c)(xiv), (c)(xvii) and 63.7550(h)(3)]

4.6. Compliance Plan

4.6.1. Reserved.

5.0 Lime Handling Facilities

5.1. Limitations and Standards

- 5.1.1. In accordance with the information filed in Permit Application R13-1477A, R13-1477B, R13-1477C and any amendments thereto, the following maximum throughputs shall not be exceeded, and, at a minimum, the following control equipment shall be installed, maintained, and operated so as to minimize particulate matter emissions.

[45CSR13, R13-1477 (Condition A.1.)]

Equip- ment ID No.	Year	Description	Maximum Capacity ¹		Control Equip- ment ²	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Equip- ment ²
Lime Unloading Circuit								
n/a	94	Railcar Unloading Transfer Hoppers	380	627,546	BH	B A	6sa, 6sb, 6sc, 6sd 6se, 6sf, 6sg, 6sh	BH BH
6si	94	Lime Unloading Conveyer Belt	450	627,546	BH	B A	6se, 6sf, 6sg, 6sh 6sk	BH BH
6sj	94	Lime Unloading Conveyer Belt	450	627,546	BH	B A	6se, 6sf, 6sg, 6sh 6sl	BH BH
8sa	94	Lime Transfer Conveyer and Associated Dribble Conveyer	450	627,546	BH	B A	6sk 8sc	BH BH
8sb	94	Lime Transfer Conveyer and Associated Dribble Conveyer	450	627,546	BH	B A	6sl 8sd	BH BH
8sg	94	Lime Storage Conveyer and Associated Dribble Conveyer	900	627,546	BH	B A	8se 9sa	BH BH
8sh	94	Lime Storage Conveyer and Associated Dribble Conveyer	900	627,546	BH	B A	8sf 9sa	BH BH
13	94	Lime Storage Silo (101,788 ton)	n/a	313,773	BH	B	9sa, 9sb	BH
14	94	Lime Storage Silo (101,788 ton)	n/a	313,773	BH	B	10sa, 10sb	BH
Dry Sorbent Injection-Circuit								
37u	2022	Pneumatic unloading to DSI Storage Silo 1	70, 250 TPY		FE			
37Au	2022	Pneumatic unloading to DSI Storage Silo 2			FE			
38u	2022	Pneumatic unloading to DSI Storage Silo 3			FE			
37	94	DSI Storage Silo 1	150 tons		BV			
37A	94	DSI Storage Silo 2	150 tons		BV			
38	94	DSI Storage Silo 3	150 tons		BV			
37pc	2022	Pneumatic Conveyer to Unit B1	2.67	23,416	FE			

Equip- ment ID No.	Year	Description	Maximum Capacity ¹		Control Equip- ment ²	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Equip- ment ²
37Apc	2022	Pneumatic Conveyer to Unit B2	2.67	23,416	FE			
38pc	2022	Pneumatic Conveyer to Unit B3	2.67	23,416	FE			
Lime Slurry Handling Circuit								
24v,25v 26v,27v	94	Ball-Mill Slaker Delivery Screw Conveyers	30 (each)	262,800 (each)	FE	n/a	n/a	n/a
24s,25s 26s,27s	94	Ball-Mill Slakers	30 (each)	262,800 (each)	SCR	n/a	n/a	n/a
46,47, 48,49	94	Lime Slurry Transfer Tanks (108,600 gal each)	n/a	712,970 (gl each)	n/a	n/a	n/a	n/a
43,44,45	94	Lime Slurry Storage Tanks (380,000 gal each)	n/a	950,627 (gl each)	n/a	n/a	n/a	n/a
System Flow Diagram Absorber Sludge Handling Circuit								
9,10, 11,12	94	Thickener Tanks	n/a	n/a	n/a	n/a	n/a	n/a
16,17, 18,19	94	Thickener Underflow Tanks (7,253 tons each)	n/a	1,428,305 (each)	n/a	n/a	n/a	n/a
Lime Handling Circuit								
13s	94	Lime Crusher	25	115,623	BH	B A	13v 17va	FE FE
14s	94	Lime Crusher	25	115,623	BH	B A	14v 17va	FE FE
15va	94	Solid Waste Processing Lime Silos (SWPLS) Loading Pnuematic Conveyer	25	115,623	FE	A	15sa	BH
16va	94	(SWPLS) Loading Pnuematic Conveyer	25	115,623	FE	A	16sa	BH
17va	94	(SWPLS) Loading Pnuematic Conveyer	25	115,623	FE	A	17sa	BH
15vb	94	(SWPLS) Loading Pnuematic Conveyer from Truck	25	115,623	FE	A	15sb	BH
16vb	94	(SWPLS) Loading Pnuematic Conveyer from Truck	25	115,623	FE	A	16sb	BH
17vb	94	(SWPLS) Loading Pnuematic Conveyer from Truck	25	115,623	FE	A	17sb	BH
33	94	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	FE	B	15sa,15sb	BH
34	94	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	FE	B	16sa,16sb	BH

Equipment ID No.	Year	Description	Maximum Capacity ¹		Control Equipment ²	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Equipment ²
35	94	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	FE	B	17sa,17sb	BH
Fly Ash Handling Circuit								
18va	94	Solid Waste Processing Fly Ash Silos (SWPFAS) Loading Pnuematic Conveyer	120	818,739	FE	A	18sa	BH
19va	94	(SWPFAS) Loading Pnuematic Conveyer	120	818,739	FE	A	19sa	BH
20va	94	(SWPFAS) Loading Pnuematic Conveyer	120	818,739	FE	A	20sa	BH
18vb	94	(SWPFAS) Loading Pnuematic Conveyer from Truck	120	818,739	FE	A	18sb	BH
19vb	94	(SWPFAS) Loading Pnuematic Conveyer from Truck	120	818,739	FE	A	19sb	BH
20vb	94	(SWPFAS) Loading Pnuematic Conveyer from Truck	120	818,739	FE	A	20sb	BH
21	94	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	FE	B	18sa,18sb	BH
22	94	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	FE	B	19sa,19sb	BH
23	94	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	FE	B	20sa,20sb	BH
Solid Waste Handling Circuit								
21va, 22va, 23va	94	Fly Ash Screw Conveyers	70 (each)	613,200 (each)	FE	A	21ta,22va, 23va	FE
21vb, 22vb, 23vb	94	Lime Screw Conveyers	10 (each)	87,600 (each)	FE	A	21tb,22ta, 23ta	FE
21vc, 22vc, 23vc	94	Lime/Fly Ash Screw Conveyers	80 (each)	700,800 (each)	FE	B A	21ta,21tb 22ta,22tb 23ta,23tb 21tc,22tc, 23tc	FE FE
21vd, 22vd, 23vd	94	Lime/Fly Ash Screw Conveyers	80 (each)	700,800 (each)	FE	B A	21tc,22tc, 23tc 21td,22td, 23td	FE FE
37v,38v	94	Centrifuge Cake Screw Conveyers	150 (each)	1,314,000 (each)	FE	A	37t,38t	FE
21s,22s, 23s	94	Solid Waste Processing (SWP) Pug Mills	600 (each)	3,303,474 (each)	SCR	B	21td,22td, 23td,37t,38 t	FE

Equipment ID No.	Year	Description	Maximum Capacity ¹		Control Equipment ²	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Equipment ²
31v,32v, 33v	94	Stabilized Sludge Screw Conveyers	600 (each)	3,303,474 (each)	FE	A	31t,32t,33t	N
34v,35v, 36v	94	Emergency Radial Stacking Conveyers	265	n/a	N	A	34t,35t,36t	N
39,40, 41	94	Emergency Stackout Piles (16,269 ft ² / 10,680 ton each)	n/a	n/a	N	B	34t,35t,36t	N

1 TPH = Tons Per Hour; TPY = Tons Per Year

2 BH – Baghouse, FE - Full Enclosure, N - None, PE - Partial Enclosure, SCR - Wet Scrubber, BV – Bin Vent Filter

[45CSR13, R13-1477 (Condition A.1.)]

- 5.1.2. In accordance with the information filed in Permit Application R13-1477A, R13-1477B, and any amendments thereto, particulate matter (PM) emissions from the following emission points shall not exceed the following limitations and the maximum exit gas flows from the associated control devices shall not be exceeded:

Control Device Identification Number	Control Device Type	Emission Point Identification Number	gr/acf ⁽¹⁾	Maximum Air Flow (acfm) ⁽²⁾
6ca,6cb,6cd	Baghouses	6e ⁽³⁾	0.009	175000
8c	Baghouse	8e	0.003	28000
9c	Baghouse	9e	0.003	10000
10c	Baghouse	10e	0.003	10000
37c	BV Filter	37e	0.015	1500
37Ac	BV Filter	37Ae	0.015	1500
38c	BV Filter	38e	0.015	1500
13c	Baghouse	13e	0.003	600
14c	Baghouse	14e	0.003	600
15c	Baghouse	15e	0.003	2700
16c	Baghouse	16e	0.003	2700
17c	Baghouse	17e	0.003	2700
18c	Baghouse	18e	0.003	6400
19c	Baghouse	19e	0.003	6400
20c	Baghouse	20e	0.003	6400

Control Device Identification Number	Control Device Type	Emission Point Identification Number	gr/acf ⁽¹⁾	Maximum Air Flow (acfm) ⁽²⁾
21c	Wet Collector	21e	0.030	2000
22c	Wet Collector	22e	0.030	2000
23c	Wet Collector	23e	0.030	2000
24c	Wet Collector	24e	0.009	1000
25c	Wet Collector	25e	0.009	1000
26c	Wet Collector	26e	0.009	1000
27c	Wet Collector	27e	0.009	1000
28c	Baghouse	28e	0.015	335

- (1) gr/acf = grains per actual cubic foot of exit gas. These limits are considered instantaneous limits.
- (2) Compliance with the maximum air flow will be based on the maximum rated capacity of all blowers feeding the emission point.
- (3) The emission limit listed is the aggregate limit for the emission point. It is not the limit for each individual baghouse but rather the aggregate limit for all three.

[45CSR13, R13-1477 (Condition A.2.)]

5.1.3. In accordance with the information filed in Permit Application R13-1477A, R13-1477B, R13-1477C and any amendments thereto, the following materials and hours of operation shall be limited to the quantities as specified below. All annual limits are calculated using a rolling yearly total. A rolling yearly total shall mean the sum of the material throughput at any given time for the previous twelve (12) months.

- a. The input of lime into the lime handling system shall not exceed 627,546 TPY.
- b. The combined amount of bottom ash transported to the landfill area (and then possibly sized and sent offsite) and the bottom ash transported directly offsite shall not exceed 192,000 TPY.
- c. The amount of fly ash, as generated by the Harrison Power Station, to be transported to the landfill (FA_{LF}) shall not exceed the amount as calculated in the following equation:

$$FA_{LF} \text{ (TPY)} = 256,000 + ((250,000 - FA_{OS}) * 0.48)$$

Where:

FA_{OS} = Amount of Fly-Ash disposed of from off-site sources.

The maximum amount of fly ash to be disposed of in the landfill shall not exceed 376,000 TPY from the Harrison Power Station and 506,000 TPY total from both Harrison Power Station and offsite sources.

- d. The amount of flue gas desulfurization (FGD) sludge to be disposed of either in the landfill or offsite shall not exceed 3,000,000 TPY.
- e. Landfill fly ash surface bulldozing shall be limited to 160 hours per year.

- f. Lime unloading operations shall be limited to 2,920 hours per year.
- g. The input of hydrated lime into the DSI system shall not exceed 70,250 TPY.

[45CSR13, R13-1477 (Condition A.3.)]

- 5.1.4. Fugitive dust control measures for haulroads shall be utilized and maintained in such a manner as to minimize dust generation and atmospheric entrainment. Those measures shall include a continuous program of watering haulroad(s) and by wet-vacuum sweeping of paved haulroads at all times haulage trucks are in operation unless such haulroads are adequately wetted by natural rainfall.
 - a. Water truck to be utilized shall be equipped with manufactured-type spray nozzles which are pressurized per manufacturer's recommended guidelines for controlling fugitive dust emissions.
 - b. Vacuum sweeper shall be of the type that utilizes wet vacuuming and filtration prior to exhausting air.
 - c. A maximum speed limit of 15 miles per hour shall be maintained on all unpaved roads. A clear and visible sign shall be posted at the beginning of all unpaved roads clearly displaying this speed limit.

[45CSR13, R13-1477 (Condition A.4.)]

- 5.1.5. Stabilized sludge shall be maintained at a minimum of 30% moisture, by weight, prior to final deposition at any landfill.

[45CSR13, R13-1477 (Condition A.5.)]

- 5.1.6. The operation of this facility is subject to requirements of 45CSR7. Pertinent sections applying to this operation include, but are not limited to:

§45-7-3.1

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 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

§45-7-3.2

The provisions of 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.

§45-7-3.7

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.

§45-7-4.1

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 found at the end of 45CSR7A.

§45-7-5.1

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.

§45-7-5.2

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.

[45CSR13, R13-1477 (Condition B.2.)]

5.2. Monitoring Requirements

- 5.2.1. Tests that are required by the Director to determine compliance with the emission limitations set forth in Condition 5.1.2 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at the maximum permitted operating conditions unless otherwise specified by the Director.

- a. Tests to determine compliance with PM emission limits shall be conducted in accordance with 45CSR7A.

[45CSR13, R13-1477 (Condition B.5.)]

- 5.2.2. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality 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 no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

[45CSR13, R13-1477 (Condition B.6)]

- 5.2.3. For Visible Emissions:

- a. Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions. 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 Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this permit condition (5.2.3.a.) if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

- b. If the 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 shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 CFR Part 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 emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of permit condition 5.2.3.a. above, in lieu of those established in this condition.

[45CSR§30-5.1.c.]

5.3. Testing Requirements

- 5.3.1. Reserved.

5.4. Recordkeeping Requirements

- 5.4.1. A record of each visible emissions observation shall be maintained on site, including any data required by 40 CFR Part 60 Appendix A, Method 9. 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 state 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.]

- 5.4.2. For the purposes of determining compliance with maximum throughput limits set forth in Condition 5.1.3, the applicant shall maintain monthly records of the throughputs of the specified materials and the hours of operation. For the purposes of determining compliance with the water truck requirement in Condition 5.1.4, the applicant shall maintain a certified daily and monthly record of water truck usage. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR13, R13-1477, (Condition B.7.)]

5.5. Reporting Requirements

- 5.5.1. Reserved.

5.6. Compliance Plan

- 5.6.1. Reserved.

6.0 Crusher CRU-03 and Conveyor C-11 [emission point ID(s): *CRU-03, C-11*]

6.1. Limitations and Standards

- 6.1.1. Emission Units CRU-03 and C-11 shall not discharge into the atmosphere gases which exhibit 20 percent opacity or greater.
[45CSR16; 40 CFR §60.254(a)]

6.2. Monitoring Requirements

- 6.2.1. Emission Units CRU-03 and C-11 shall be observed visually at least each calendar month during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 CFR 60 Appendix A, Method 22. If visible emissions are observed during these monthly observations, or at any other time, that appear to exceed the allowable visible emission requirement in Condition 6.1.1, visible emissions evaluations in accordance with 40 CFR Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one month from the time of the observation. A visible emissions evaluation in accordance with 40 CFR Appendix A, Method 9 shall not be required under Condition 6.2.1 if the visible emissions condition is corrected in a timely manner; the emission unit CRU-03 is operating at normal operation conditions; and, the cause and corrective measures taken are recorded.
[45CSR§30-5.1c]

6.3. Testing Requirements

- 6.3.1. Reserved.

6.4. Recordkeeping Requirements

- 6.4.1. The Permittee shall retain records of all required monitoring data and support information.
[45CSR§30-5.1c.]

6.5. Reporting Requirements

- 6.5.1. Reserved.

6.6. Compliance Plan

- 6.6.1. Reserved.

7.0 Emergency Generators and Fire Pumps [emission point ID(s): *EDG1, EDG2, EDG3, EG-1, EG-2, FP-01, FP-02*]

7.1. Limitations and Standards

7.1.1. If you own or operate an emergency stationary ICE/RICE, you must operate the emergency stationary ICE/RICE according to the requirements in this permit condition. In order for the engine to be considered an emergency stationary ICE/RICE under 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in this condition is prohibited. If you do not operate the engine according to the requirements in this condition, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, or 40 CFR 63 Subpart ZZZZ, and must meet all requirements for non-emergency engines of these subparts as applicable.

- a. There is no time limit on the use of emergency stationary ICE/RICE in emergency situations.
- b. You may operate your emergency stationary ICE/RICE for the purpose specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs c of this permit condition counts as part of the 100 hours per calendar year allowed by the following:

Emergency stationary ICE/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 ICE/RICE beyond 100 hours per calendar year.

- c. Emergency stationary ICE/RICE 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. 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.

For EG-1, EG-2 and FP-01 only; 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:

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
2. 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.
3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

4. The power is provided only to the facility itself or to support the local transmission and distribution system.
5. 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; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., f. and e.; 40 CFR §§60.4243(d)(1), (d)(2)(i), (d)(3); §§60.4211(f)(1), (f)(2)(i), (f)(3); 40 CFR §§63.6640(f)(1), (f)(2)(i), (f)(3)]

- 7.1.2. For the existing emergency stationary CI RICE ≤ 500 hp located at a major source of HAP emissions, the permittee shall comply with the following requirements from Table 2c of 40 CFR 63 Subpart ZZZZ.
- a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first. The permittee has the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.
 - b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.
 - c. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous, whichever comes first, and replace as necessary.
 - d. 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.

[45CSR34; 40 CFR §63.6602; Table 2c, Item #1 of 40 CFR 63 Subpart ZZZZ, §63.6625(h)] (EDG3, FP-02)

- 7.1.3. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2c of 40 CFR 63 Subpart ZZZZ that apply according to the following methods from Table 6 of 40 CFR 63 Subpart ZZZZ.
- a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - b. 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 §63.6640(a); Table 6, Item 9 of 40 CFR 63 Subpart ZZZZ] (EDG3, FP-02)

- 7.1.4. The permittee must comply with the following general compliance requirements:
- 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] (EDG3, FP-02)

- 7.1.5. The permittee must comply with the general provisions of 40 CFR 63 as shown in Table 8 of 40 CFR 63 Subpart ZZZZ except for the following which do not apply as per 40 CFR §63.6645(a)(5): 40 CFR §§ 63.7(b) and (c), 40 CFR §§ 63.8(e), (f)(4), and (f)(6), and 40 CFR §§ 63.9(b)-(e), (g) and (h).

[45CSR34; 40 CFR §63.6665, 40 CFR §63.6645(a)(5); Table 8 of 40 CFR 63 Subpart ZZZZ] (EDG3, FP-02)

- 7.1.6. The pump house emergency generator EG-1 must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63.

[45CSR34; 40 CFR §63.6590(c)(3); 45CSR13, G60-D049 General Permit Registration and G60-D, condition 4.1.2.g.] (EG-1)

- 7.1.7. **Regulated Pollutant Limitation.** The registrant shall not cause, suffer, allow or permit emissions of any regulated pollutant listed in the General Permit Registration to exceed the emission limit (pounds per hour and tons per year) recorded with the registrant's General Permit Registration as listed below.

Emission Unit	Nitrogen Oxides (NO _x)		Carbon Monoxide (CO)		Volatile Organic Compounds (VOC)	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
EG-1	0.32	0.08	1.41	0.35	0.22	0.06
EG-2	2.67	0.67	5.33	1.33	1.33	0.33
FP-01	3.37	0.84	2.86	0.72	1.05	0.26

Note -Ton/yr are based on operating the engine 500 hours per year.

[45CSR13, G60-D049 General Permit Registration, Emission Limitations; and G60-D, condition 5.1.2.] (EG-1, EG-2, FP-01)

- 7.1.8. The wetlands pump house emergency generator (EG-1) must comply with the following emission standards:

NO _x (g/HP-hr)	CO (g/HP-hr)	VOC (g/HP-hr)
2.0	4.0	1.0

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4233(e); Table 1 of 40 CFR 60 Subpart JJJJ] (EG-1)

- 7.1.9. The leachate collection conveyance system emergency generator (EG-2) must comply with the following emission standards:

HC + NO _x (g/kW-hr)	CO (g/kW-hr)
3.8	6.5

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4233(c); 40 CFR §1048.101(c)] (EG-2)

- 7.1.10. The emergency diesel fire pump (FP-01) must comply with the following emission standards:

NMHC + NO _x (g/KW-hr/g/HP-hr)	CO (g/KW-hr/g/HP-hr)	PM (g/KW-hr/g/HP-hr)
4.0/3.0	3.5/2.6	0.20/0.15

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and e.; 45CSR16; 40 CFR §60.4205(c); and Table 4 of 40 CFR 60 Subpart IIII] (FP-01)

- 7.1.11. Owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII 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 80.1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and e.; 45CSR16; 40 CFR §60.4207(b)] (FP-01)

- 7.1.12. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR §60.4233 over the entire life of the engine.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4234] (EG-1, EG-2)

- 7.1.13. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CR §60.4205 over the entire life of the engine.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and e.; 45CSR16; 40 CFR §60.4206] (FP-01)

- 7.1.14. Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in 40 CFR §60.4233(e).

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4233(h)] (EG-2)

- 7.1.15. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of 40 CFR §60.4243(f), perform extensive service means to disassemble the engine (or portion of the engine or engine

system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4243(f)] (EG-1)

7.1.16. If you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must do all of the following, except as permitted under 40 CFR §60.4211(g):

- a. Operate and maintain the stationary CI internal combustion engine and control device 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 part 1068, as they apply to you.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and e.; 45CSR16; 40 CFR §60.4211(a)] (FP-01)

7.1.17. FP-01 must be certified to the emission standards in 40 CFR §60.4205(c) and must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). 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 in accordance with 40 CFR §60.4211(g).

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 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. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and e.; 45CSR16; 40 CFR §§60.4211(c), (g) and (g)(3)] (FP-01)

7.1.18. **Maximum Hourly Limitation.** The maximum hours of operation for any registered emergency generator listed in the General Permit Registration application shall not exceed 500 hours per year. Compliance with the Maximum Yearly Hourly Operation Limitation shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.1.3.] (EG-1, EG-2, FP-01)

7.1.19. The applicable emergency generator(s) shall be operated and maintained as follows:

- a. In accordance with the manufacturer's recommendations and specifications or in accordance with a site specific maintenance plan; and,

- b. In a manner consistent with good operating practices.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.1.4.] (EG-1, EG-2, FP-01)

- 7.1.20. The registrant shall comply with all applicable NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ , and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.1.6.] (EG-1, EG-2, FP-01)

- 7.1.21. The emission limitations specified in section 7.1.7. shall apply at all times except during periods of start-up and shut-down provided that the duration of these periods does not exceed 30 minutes per occurrence. The registrant shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start-up and shut-down. The emissions from start-up and shut-down shall be included in the twelve (12) month rolling total of emissions. The registrant shall comply with all applicable start-up and shut-down requirements in accordance with 40 CFR Part 60, Subparts IIII, JJJJ and 40 CFR Part 63, Subpart ZZZZ.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.1.7.] (EG-1, EG-2, FP-01)

7.2. Monitoring Requirements

- 7.2.1. 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)(2)] (EDG3, FP-02)

- 7.2.2. You must install a non-resettable hour meter if one is not already installed.

[45CSR34; 40 CFR §63.6625(f)] (EDG3, FP-02)

- 7.2.3. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 of Table 2c to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil and filter change requirement in Tables 2c to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil and filter in Table 2c to 40 CFR 63 Subpart ZZZZ. 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 and filter. If any of the limits are exceeded, the engine owner or operator must change the oil and filter 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 and filter 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 and filter changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34; 40 CFR §63.6625(i); Footnote 2 of Table 2c of 40 CFR 63 Subpart ZZZZ] (EDG3, FP-02)

- 7.2.4. 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.

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.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §§60.4237(a) and (b)] (EG-1, EG-2)

7.3. Testing Requirements

- 7.3.1. The registrant shall comply with all applicable testing requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.4.1.] (EG-1, EG-2, FP-01)

7.4. Recordkeeping Requirements

- 7.4.1. The permittee must comply with the following recordkeeping requirements:

- 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).
- b. Records of the occurrence and duration (in hours) of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with §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.
- f. You must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.
- g. 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.
- h. 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.

[45CSR34; 40 CFR §§63.6655 (a), (d), (e), & (f)] (EDG3, FP-02)

- 7.4.2. Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
[45CSR34; 40 CFR §63.6660(a)] (EDG3, FP-02)
- 7.4.3. As specified in §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)] (EDG3, FP-02)
- 7.4.4. 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 §63.10(b)(1).
[45CSR34; 40 CFR §63.6660(c)] (EDG3, FP-02)
- 7.4.5. The certified engines EG-1 and EG-2 must demonstrate compliance with their respective emission standards in 40 CR 60 Subpart JJJJ according to one of the methods specified below:
- a. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.
 - b. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to 40 CFR §§60.4243(a)(2)(i) through (iii), as appropriate.
- [45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §§60.4243(a)(1) 60.4243(a)(2), and 60.4243(b)(1)] (EG-1, EG-2)**
- 7.4.6. Owners and operators of all stationary SI ICE must keep records of the following information:
- a. All notifications submitted to comply with this subpart 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 1048, 1054, and 1060, as applicable.
- [45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §§60.4245(a)(1), (a)(2) and (a)(3)] (EG-1, EG-2)**
- 7.4.7. 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. 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.

[45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., and f.; 45CSR16; 40 CFR §60.4245(b)] (EG-1, EG-2)

7.4.8. To demonstrate compliance with general permit condition 7.1.18., the registrant shall maintain records of the hours of operation of the emergency generator(s) on a monthly basis.
[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.3.1.] (EG-1, EG-2, FP-01)

7.4.9. To demonstrate compliance with general permit condition 7.1.19., the registrant shall maintain records of the maintenance performed on each emergency generator.
[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.3.2.] (EG-1, EG-2, FP-01)

7.4.10. The registrant shall comply with all applicable recordkeeping requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.
[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.3.4.] (EG-1, EG-2, FP-01)

7.4.11. **Retention of records.** The registrant 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. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant for a period of five (5) years. Said records shall be readily available to the Secretary of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Secretary shall be certified by a responsible official. Where appropriate, the registrant may maintain records electronically.
[45CSR13, G60-D049 General Permit Registration and G60-D, conditions 3.5.1. and 5.3.5.] (EG-1, EG-2, FP-01)

7.5. Reporting Requirements

7.5.1. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in 40 CFR §60.4211(f)(3)(i) and/or 40 CFR §60.4243(d)(3)(i) you must submit an annual report according to the following requirements

- 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 spent for operation for the purpose specified in §60.4211(f)(3)(i) and/or §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i) and/or §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. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- c. Submit annual report electronically according to 40 CFR §60.4214(g) and/or §60.4245(g).

[45CSR16; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., e. and f.; 40 CFR §60.4214(d); 40 CFR §60.4245(e)] (EG-1, EG-2, FP-01)

- 7.5.2. If the 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.

[45CSR34; Footnote 1 of Table 2c of 40 CFR 63 Subpart ZZZZ] (EDG1, EDG2, EDG3 and FP-02)

- 7.5.3. The permittee must report each instance in which each applicable emission limitation or operating limitation in Table 2c to 40 CFR 63 Subpart ZZZZ was not met. These instances are deviations from the emission and operating limitations of 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements of 40 CFR § 63.6650.

[45CSR34; 40 CFR §63.6640(b)] (EDG3, FP-02)

- 7.5.4. The permittee must report each instance in which the applicable requirements in Table 8 to 40 CFR 63 Subpart ZZZZ were not met.

[45CSR34; 40 CFR §63.6640(e)] (EDG3, FP-02)

- 7.5.5. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in 40 CFR 63 Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of 40 CFR 63 Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR 63 Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[45CSR34; 40 CFR §63.6650(f)] (EDG3, FP-02)

- 7.5.6. The registrant shall comply with all applicable notification requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National

Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines specified in 40 CFR Part 63. Subpart ZZZZ.

[45CSR13, G60-D049 General Permit Registration and G60-D, condition 5.5.1.] (EG-1, EG-2, FP-01)

- 7.5.7. If you are required to submit notifications or reports following the procedure specified in this 40 CFR §60.4214(g) and/or §60.4245(g), you must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in paragraphs a. and b. of this condition. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this 40 CFR §60.4214(g) and/or §60.4245(g).
- a. The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described in 40 CFR §60.4214(g) and/or §60.4245(g), should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Compression and/or Spark Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.
- b. If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Compression and/or Spark Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

[45CSR16; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., e. and f.; 40 CFR §60.4214(g); 40 CFR §60.4245(g)] (EG-1, EG-2, FP-01)

- 7.5.8. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in 40 CFR §§60.4214(h)(1) through (7) and/or 40 CFR §§60.4245(h)(1) through (7).

[45CSR16; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., e. and f.; 40 CFR §60.4214(h); 40 CFR §60.4245(h)] (EG-1, EG-2, FP-01)

- 7.5.9. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force

majeure, you must meet the requirements outlined in 40 CFR §§60.4214(i)(1) through (5) and/or 40 CFR §§60.4245(i)(1) through (5).

[45CSR16; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., e. and f.; 40 CFR §60.4214(i); 40 CFR §60.4245(i)] (EG-1, EG-2, FP-01)

- 7.5.10. Any records required to be maintained by 40 CFR 60 Subpart IIII and/or Subpart JJJJ that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[45CSR16; 45CSR34; 45CSR13, G60-D049 General Permit Registration, and G60-D, conditions 4.1.2.b., e. and f.; 40 CFR §60.4214(j); 40 CFR §60.4245(j)] (EG-1, EG-2, FP-01)

7.6. Compliance Plan

- 7.6.1. Reserved.

8.0 Rapid Discharge Rail Unloading [emission point ID(s): EP-1 through EP-7, 1E through 6E, PHaul]

8.1 Limitations and Standards

- 8.1.1. Emissions from activities permitted herein shall not exceed the following when handling Powder River Basin Coal:

	PM		PM ₁₀		PM _{2.5}	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Railcar Unloading	0.66	0.45	0.31	0.22	0.05	0.04
Coal Load-in	3.27	2.25	1.55	1.07	0.24	0.17
Coal Storage Pile	0.43	0.06	0.22	0.03	0.09	0.01
Coal Load-out	9.14	6.28	2.12	1.46	0.21	0.14
Conv. Transfer Points	1.31	1.35	0.62	0.64	0.10	0.10
Total	14.81	10.39	4.82	3.42	0.69	0.46

[45CSR13, R13-2988 (Condition 4.1.1)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.2. Emissions from activities permitted herein shall not exceed the following when handling Illinois Basin Coal:

	PM		PM ₁₀		PM _{2.5}	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Railcar Unloading	0.80	0.55	0.38	0.26	0.06	0.04
Coal Load-in	3.97	2.74	1.88	1.30	0.29	0.20
Coal Storage Pile	0.21	0.06	0.11	0.03	0.05	0.01
Coal Load-out	4.52	3.11	0.86	0.59	0.10	0.07
Conv. Transfer Points	1.59	1.64	0.76	0.78	0.12	0.12
Total	11.09	8.1	3.99	2.96	0.62	0.44

[45CSR13, R13-2988 (Condition 4.1.2)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.3. In no case shall annual emissions exceed the following:

	PM	PM ₁₀	PM _{2.5}
	TPY	TPY	TPY
Total	10.39	3.42	0.46

[45CSR13, R13-2988 (Condition 4.1.3)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.4. The facility's [i.e., RDRU system] annual throughput of total coal shall not exceed 5,000,000 tons per year. Compliance with this limit shall be based on a 12-month rolling total.

[45CSR13, R13-2988 (Condition 4.1.4)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.5. 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.

[45CSR§2-5.1, 45CSR13, R13-2988 (Condition 4.1.5)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.6. On and after the date on which the performance test is conducted or required to be completed under 40 CFR §60.8, whichever date comes first, an owner or operator of 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, as applicable to the affected facility.

- a. Except as provided in paragraph (b)(3) of 40 CFR §60.254, 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.
- b. 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).
- c. 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.

[45CSR13, R13-2988 (Condition 4.1.6); 45CSR16; 40CFR§60.254(b)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.7. **Fugitive Coal Dust Emissions Control Plan for Subpart Y - Fugitive Coal Dust Emissions Control Plan.** The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of 40 CFR §60.254.

- a. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.
- b. For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of 40 CFR §60.254 are met), use of a wind barrier, compaction, or use of a vegetative

cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measures or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

- c. Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of 40 CFR §60.254 as specified in paragraphs (c)(3)(i) through (iv) of 40 CFR §60.254.
 1. The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of 40 CFR §60.254.
 2. The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternative control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).
 3. While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of 40 CFR §60.254 while the petition is pending.
 4. If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.
- d. The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority prior to the startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of 40 CFR 60 Subpart Y, whichever is later.
- e. The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of 40 CFR §60.254.
 1. The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of 40 CFR §60.254.
 2. If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegate authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of 40

CFR §60.254, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of 40 CFR §60.254.

- f. Where appropriate chemical dust suppressant agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

[45CSR13, R13-2988 (Condition 4.1.7); 45CSR16; 40CFR§60.254(c)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.1.8. The process rates contained in Table 1.0 of permit R13-2988B shall not be exceeded. Additionally, the permittee shall install, maintain and operate all control devices listed in Table 1.0 of permit R13-2988B.
[45CSR13, R13-2988 (Condition 4.1.8)]
- 8.1.9. The total amount of S-Sorb delivered to the two S-Sorb Silos (RC Units 8200 and 8300) combined shall not exceed 23,750 tons per year. Compliance with this condition shall be based on a rolling twelve month total.
[45CSR13, R13-2988 (Condition 4.1.9)]
- 8.1.10. S-Sorb Silos (RC Units 8200 and 8300) shall be equipped with fabric filters. Said filters shall be designed, installed, operated and maintained so as to reduce particulate matter emissions by at least 99.99%
[45CSR13, R13-2988 (Condition 4.1.10)]
- 8.1.11. S-Sorb Day Bin (RC Unit 3200) shall be equipped with a fabric filter. Said filter shall be designed, installed, operated and maintained so as to reduce particulate matter emissions by at least 99.92%.
[45CSR13, R13-2988 (Condition 4.1.11)]
- 8.1.12. The total amount of MerSorb delivered to the MerSorb storage tank (RC Unit 3500) shall not exceed 115,200 gallons per year. Compliance with this condition shall be based on a rolling twelve month total.
[45CSR13, R13-2988 (Condition 4.1.12)]
- 8.1.13. NO_x emissions from the Units 1, 2 and 3 boilers shall not exceed the following based on a rolling 30 day average. For the purposes of this permit, a rolling 30 day average shall mean the average daily (calendar day) emission rate from the last 30 operating days, excluding NO_x emissions during periods that ammonia injection to the selective catalytic reduction system must be discontinued due to low flue gas temperature to avoid damaging the catalyst. Low flue gas temperature conditions shall mean when the temperature of the flue gas is less than 605°F during any operating hour and this time shall be excluded from the operating day for the purpose of averaging. An operating day shall mean a calendar day in which any boiler is operated for at least one hour.
- a. The NO_x emission rate shall not exceed 0.25 lb/mmbtu on a 30 day rolling average; and
- b. Beginning the 30 day period that commences on May 1 and ends on May 30 and for each succeeding 30 day period through September 30, the NO_x emission rate shall not exceed 0.20 lb/mmbtu.
- c. The permittee shall monitor the catalyst flue gas temperature and record it as rolling block hourly averages. The recorded information shall include the date, hour, catalyst flue gas temperature, ammonia flow and an indicator that shows if the ammonia flow has been discontinued due to low flue gas temperature.

- d. The permittee shall maintain on-site the records required in 8.1.14.c. for a period of five (5) years. Such records may be in electronic form but must be available for inspection by designated agents of the DAQ and exportable to standard database/spreadsheet formats.

[45CSR13, R13-2988 (Condition 4.1.13)]

- 8.1.14. **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 of permit R13-2988B 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, R13-2988 (Condition 4.1.14)]

8.2. Monitoring Requirements

- 8.2.1. Reserved.

8.3. Testing Requirements

- 8.3.1. The permittee shall comply with all applicable standards of 40 CFR 60 Subpart Y including but not limited to the following:

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 40 CFR §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.
 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.
 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.

[45CSR13, R13-2988 (Condition 4.2.1); 45CSR16; 40 CFR §§60.255(b), (b)(2)(i) and (b)(2)(ii)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.3.2. **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, 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.
 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 40 CFR Part 60. 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.

[45CSR13, R13-2988 (Condition 4.2.2); 45CSR16; 40 CFR §60.255(f)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.3.3. The permittee shall perform daily monitoring and recordkeeping of the total daily sorbent usage rate, and records of startups, shut-downs, malfunctions, and maintenance of the Refined Coal System. Daily records maintained in accordance with this paragraph shall be available upon request at the facility.
[45CSR13, R13-2988 (Condition 4.2.3)]
- 8.3.4. In order to determine compliance with condition 8.1.9., the permittee shall monitor and record the amount of S-Sorb delivered to the facility on a daily basis.
[45CSR13, R13-2988 (Condition 4.2.4)]
- 8.3.5. In order to determine compliance with condition 8.1.12., the permittee shall monitor and record the amount of MerSorb delivered to the facility on a daily basis.
[45CSR13, R13-2988 (Condition 4.2.5)]
- 8.3.6. In order to determine compliance with condition 8.1.13., the permittee shall install, certify, operate and maintain continuous emissions monitoring systems (CEMS). Said CEMS shall be designed, installed, operated and maintained in accordance with 40 CFR 75 as applicable.
[45CSR13, R13-2988 (Condition 4.2.6)]

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 of permit R13-2988B, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2988 (Condition 4.3.2)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of permit R13-2988B, 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, R13-2988 (Condition 4.3.3)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.3. In order to determine compliance with the throughput requirement of section 8.1.4 of this permit the permittee shall monitor and record the amount of total coal processed through the Rapid Discharge Rail Unloading facility on a monthly basis.

[45CSR13, R13-2988 (Condition 4.3.4)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.4. In order to determine compliance with the requirements of sections 8.3.1 and 8.3.2 of this permit, records of the Method 22 and/or 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.

[45CSR13, R13-2988 (Condition 4.3.5)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.5. 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.

- 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 (a)(7)(i) through (iii) 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.

[45CSR16; 40CFR§60.258(a)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.5. Reporting Requirements

- 8.5.1. 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, R13-2988 (Condition 4.4.1)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.5.2. For the purpose of reports required under 40 CFR §60.7(c), any owner operator subject to the provisions of this 40 CFR 60 Subpart Y 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.

[45CSR16; 40CFR§60.258(b)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.5.3. 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 40 CFR §§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 40 CFR§60.255(d) shall also include information which demonstrates that the control devices are identical.

[45CSR16; 40CFR§60.258(c)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.5.4. After July 1, 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 data 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.

[45CSR16; 40CFR§60.258(d)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.6. Compliance Plan

- 8.6.1. Reserved.

APPENDIX A

45CSR2 and 45CSR10 Monitoring Plan

Monitoring and Recordkeeping Plan
45 CSR 2 and 45 CSR 10
Utility Boilers

Facility Information:

Facility Name: Harrison Power Station

Facility Address: Harrison Power Station
State Route 20 (P.O. Box 600)
Haywood, WV 26366

Facility Contact: Sean P. Kelly
Director, Harrison Plant
Telephone: (304) 584-2233
Fax: (304) 584-2408

Air Permitting: James A. Lefik
FirstEnergy Environmental Department
800 Cabin Hill Drive
Greensburg, PA 15601
Telephone: (724) 838-6136
Fax: (234) 678-2384

Facility Description: (Plant ID #3300015)

The Harrison Power Station is a coal-fired electric generating facility with three (3) main combustion units (Units 1, 2 & 3) with in-service dates of 1972, 1973, and 1974 respectively, discharging through three (3) scrubbed stacks (1, 2, and 3) housed within a single concrete stack shell. The plant was retrofitted with a flue-gas desulfurization system (FGD) on all three units in 1995. The scrubbed stacks have a height of approximately 1,000 feet each, with an outlet diameter of approximately 26 feet each. Each combustion unit is also equipped with an electrostatic precipitator (ESP) with 99.5% removal efficiency. There are two (2) hyperbolic cooling towers that service the three units. The Harrison Power Station also has two (2) auxiliary boilers (1A and 1B) that discharge to a separate (auxiliary) stack. Each unit has a design heat input greater than 10 MMBtu/hr making them subject to 45 CSR 2 and 45 CSR 10.

I. 45 CSR 2 Monitoring Plan:

In accordance with §45-2-8.2.a., the following proposed plan is for monitoring compliance with the opacity limits found in §45-2-3:

A. Scrubbed Stacks 1, 2 and 3

1. Applicable Standard:

Visible Emission Limit: 10% opacity based on a six-minute block average, 45CSR§2-3.1.

2. Monitoring Methods

Per 45CSR§2-3.2, fuel burning units which employ wet scrubbing systems are not required to install continuous opacity monitors (COMS). The Harrison Power Station will demonstrate compliance utilizing the “Non-COMS Based Monitoring” option under 45CSR§2A-6.3

a. Opacity Monitoring

45CSR§2A-6.3.a.1 requires that the monitoring plan include provisions to take Method 9 readings for compliance determination at a minimum of once per month per combined stacks during months when the source has operated at normal conditions for at least twenty-four (24) consecutive hours and weather/lighting conditions are conducive to taking proper Method 9 readings. To satisfy this requirement, the Harrison station will conduct and record a Method 9 opacity observation each calendar month, at a frequency not to exceed forty-five (45) days between consecutive observations, using a certified reader. The opacity observation, consisting of 24 consecutive readings spaced at 15-second intervals, will be conducted using the procedures described in Appendix A to 40 CFR 60 Method 9. These 24 readings will then be reduced to a 6-minute block average in order to demonstrate compliance with the 10 % opacity limitation, which is based on a 6-minute block average. Since the units employ wet scrubbers, the Method 9 readings will be taken at the point where uncombined water/steam is no longer present.

b. Parametric Monitoring

45CSR§§2A-6.3.a.2 and a.3: Operating Parameters and Monitoring Method and Frequency for Each Parameter

Monitoring of the ESP Power levels established in the approved Compliance Assurance Monitoring (CAM) plan developed in accordance with 40 CFR Part 64.

The testing to determine the CAM indicators for each specific emission unit/stack configuration was conducted at the Harrison Station between April 20 and April 22, 2009. Testing was performed in accordance with the WV DEP-approved CAM test protocol. The CAM emission test program measured particulate emissions using a TEOM 7000 Continuous Source Particulate Sampler. Given the fact that all three Harrison units employ a wet FGD system that, by design, create a saturated flue gas stream, the TEOM 7000 sampler was configured to run in a testing mode equivalent to EPA Reference Method 5B. Particulate matter emissions and ESP power input (in kW) were measured simultaneously during each test to determine the minimum acceptable ESP power levels that still demonstrated compliance with the 316.25 lb/hr particulate matter limit for each unit. Secondary current and voltage for each ESP field are directly measured using instrumentation integrated into the ESP unit. These parameters are measured continuously and recorded no less than four (4) times each hour.

Harrison Power Station will monitor, calculate and record ESP power levels to ensure that each unit remains above the minimum power levels as determined during the aforementioned CAM testing. As summarized in the final submitted CAM testing report, these levels were determined to be:

Unit 1 = 127 kW Unit 2 = 118 kW Unit 3 = 104 kW

45CSR§2A-6.3.a.4: Nominal Range of Input Parameters

Total ESP power range:	Unit 1 = 0 to 1200 kW
	Unit 2 = 0 to 1200 kW
	Unit 3 = 0 to 1200 kW

45CSR§2A-6.3.a.5: Explanation of Chosen Input Parameter and how it is Indicative of Compliance

In April 2009, CAM testing was conducted at Harrison Power Station for the purpose of determining minimum ESP power levels that were needed to indicate compliance with the filterable particulate matter weight emission rate for each unit. Power input data (based on secondary voltage and secondary current) for each field of the ESP was collected during the full range of normal daily operations, in accordance with the WVDEP approved CAM test protocol. A TEOM 7000 Source Particulate Sampler was used to collect representative short-term continuous PM samples. The minimum power levels needed to demonstrate compliance with the 316.25 lbs/hr filterable PM limit were identified and reported for each unit, as follows:

Unit 1: 127 kW

Unit 2: 118 kW

Unit 3: 104 kW

45CSR§2A-6.3.a.6: Explanation of how Nominal Ranges were chosen

ESP power range is based on specifications of each precipitator, based on the total secondary power (sum of current x voltage) in each T/R set. The minimum unit-specific power levels above were determined during the CAM testing.

45CSR§2A-6.3.a.8: Response Plan to be Implemented during Excursions

If the ESP power input in any unit drops below the minimum level (Unit 1 = 127 kW; Unit 2 = 118 kW; Unit 3 = 104 kW) for any period exceeding one hour, the owner or operator shall perform Method 9 readings for a minimum of six (6) minutes for each hour during the excursion. Such Method 9 readings shall continue each hour until four (4) successive six-minute observations demonstrate compliance.

- c. In addition to the opacity and parametric monitoring, each unit will continue to be periodically tested for particulate matter using the prescribed schedule as outlined in 45CSR§2-8.1 and 45CSR§2A-5.2. Method 9 visible emission tests shall be conducted in conjunction with all weight emission testing as outlined in 45CSR§2A-5.1.a.

B. Auxiliary Stack

1. Applicable Standard: 10% opacity based on a six-minute block average 45CSR§2-3.1.
2. Monitoring Method(s)

The Harrison Power Station petitioned the Office of Air Quality (OAQ) Chief for alternative monitoring requirements and exemption from testing for the auxiliary boilers and the associated stack, pursuant to 45CSR2 Section 8.4.a and 8.4.a.1 (Infrequent Use Exception). Based on an average heat content of 139,000 mmBtu/gallon and a design heat input of 202.2 mmBtu/hour, Auxiliary Boilers 1A and 1B totaled 0.0 hours of oil-fired operation over the 2010-2012 three-year time period. Similarly, Aux Boiler 1A averaged 9.8 hours, and Aux Boiler 1B averaged 8.2 hours of natural gas-firing over the same three-year period. Thus, the average total hours of operation for auxiliary boilers is approximately 9 hours per boiler per year, or approximately 0.1% of the 8,760 available hours for each boiler. Based on these limited actual operating hours, Harrison still believes that the requirement for COMS installation per 45 CSR2A Section 6.2.a is overly burdensome and sufficient reason for the continuation of the alternative monitoring methods proposed here. The Harrison Power Station will continue, as an alternative to COMS monitoring, to conduct Method 9 (visible emission) readings, with a minimum duration of thirty (30) minutes, once a month provided the following conditions are met: 1) The auxiliary boiler has operated at

normal, stable load conditions for at least 24 consecutive hours, and 2) weather/lighting conditions are conducive to taking proper Method 9 readings.

II. 45 CSR 10 Monitoring Plan:

In accordance with 45CSR§10-8.2.c., the following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in 45CSR§10-3:

A. Scrubbed Stacks 1, 2 and 3

1. Applicable Standard: The product of 5.12 and the total actual heat inputs for all units discharging through the stacks in million BTU's per hour. Compliance with the SO₂ limit is based on a continuous 24-hour averaging time; 45CSR§§10-3.3a and 3.8.
1. Monitoring Method: The method of monitoring SO₂ mass emissions from Stacks 1, 2 and 3 will be Continuous Emission Monitors (CEMS). The CEMS are installed, maintained and operated in compliance with 40 CFR Part 75. As specified in 45 CSR§10-8.2.c.1, measurement with a certified CEMS shall satisfy the monitoring plan requirements.

B. Auxiliary Stack

1. Applicable Standard: The product of 3.2 and the total design heat inputs for Type "b" fuel burning units, discharging through the stacks in million BTU's per hour. Compliance with the SO₂ limit is based on a continuous 24-hour averaging time. Ref: 45CSR§§10-3.3.f and 3.8.
2. Monitoring, Recordkeeping, and Exception Reporting Requirements: The Harrison Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45CSR§10-8 in accordance with 45 CSR§10-10.3 because the fuel burning sources combust a combination of distillate oil and natural gas. 45CSR§10-3.8 also contains the requirement for the development of a monitoring plan. Because the burning of distillate oil results in an SO₂ emission rate well below the standard, fuel sampling and analysis may continue to be performed at this facility, but will be done so at the discretion of the owner/operator. Because the burning of natural gas results in negligible SO₂ emission rates, fuel sampling and analysis of natural gas will not be performed. It is not required by this monitoring plan for the purposes of indicating compliance of the auxiliary boilers with SO₂ standards.

III. 45 CSR 2 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

1. 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 determined in 45CSR§2A-7.1.a.
2. Pipeline quality natural gas only, if used: such record shall include, but not limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis as determined in 45CSR§2A-7.1.a.1.
3. Distillate oil only: 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 as determined in 45CSR§2A-7.1.a.2.

4. Coal only: 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 an ash, BTU and sulfur content analysis for each shipment as determined in 45CSR§2A-7.1.a.4.
5. Alternative, and/or opportunity 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 as determined by 45CSR§2A-7.1.a.5.
6. Combination of fuels: the owner or operator shall comply with the applicable recordkeeping requirements of 45CSR§2A-7.1.a.1 through 7.1.a.5 for each fuel burned as determined in 45CSR§2A-7.1.a.6.

B. Record Maintenance

7. 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, testing, measurement and reporting. Support information includes all calibration and maintenance records, strip charts, and copies of all required reports. In the case of auxiliary boilers, strip chart recordings, etc, are generally not available.

C. Exception Reporting

1. A “Monitoring Summary Report” and/or an “Excursion and Monitoring Plan Performance Report” shall be submitted to the Director on a quarterly basis in accordance with 45CSR§2A-7.2.c. 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 reports required under 45CSR§2A-7.2.c shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The Monitoring Summary Report shall be in a format approved by the Director. Ref: 45CSR§2A-7.2.c.

45CSR2A §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.

45CSR2A §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.

45CSR2A §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:

45 CSR 2A §7.2.c.3.A - The magnitude of each excursion and the starting and ending dates and times of each excursion (ESP power below minimum level)

45 CSR 2A §7.2.c.3.B - Specific identification of each excursion that occurs during startups, shutdowns and malfunctions.

45 CSR 2A §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).

45 CSR 2A §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.

45 CSR 2A §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.

To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 shall be followed. Ref: 45CSR§2A-7.2.d.

2. Pursuant to 45 CSR 2, Section 8.4.a and 8.4.a.1, the Harrison Power Station petitioned and was granted approval by the Office of Air Quality (OAQ) Chief for alternative testing, monitoring, and reporting requirements for the auxiliary boilers and associated stack. The basis for the petition was “infrequent operation.”
 - a. As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boilers, Harrison proposed that the fuel analysis records maintained under the fuel quality analysis and recordkeeping section of this plan provide sufficient evidence of compliance with the particulate mass emission limit. Based on an average heat content (distillate oil) of approximately 139,000 Btu/gallon and an AP-42 based particulate mass emissions emission factor of 2 lbs/thousand gallons, the calculated particulate mass emissions of the auxiliary boilers are 0.01 lb/mmBtu for each boiler when firing distillate oil. Based on an average heat content (natural gas) of approximately 1,000 Btu/scf and an AP-42 based filterable PM emission factor of 1.9 lb/Mcf, the calculated particulate mass emissions of the auxiliary boilers are 0.0019 lb/mmBtu for each boiler. Hence, it is estimated that each boiler has a calculated particulate mass emissions rate of approximately 0.0019 lb/mmBtu when firing natural gas. For the purpose of meeting exception reporting requirements for fuel oil, any fuel oil analysis indicating a heat content of less than 25,000 Btu/gallon will be reported to the OAQ to fulfill the requirement for a periodic exception report under 45 CSR 2 Section 8.3.b. and 45CSR§2A-7.2.a. A heat content of 25,000 Btu/gal and a particulate emissions factor of 2 lbs/thousand gallons would result in calculated particulate mass emissions of approximately 90% of the applicable 45 CSR 2 weight emission standard. Ref: 45CSR§2-4.1.b.
 - b. As an alternative to the exception reporting requirements for opacity emissions from the auxiliary boilers, Harrison will maintain a copy of each properly conducted (appropriate weather and lighting conditions, etc.) Method 9 evaluation on-site. Any properly conducted Method 9 test that indicates an exceedance shall be submitted to the OAQ on a quarterly basis (within 30 days of the end of the quarter) along with an accompanying description of the excursion cause, any corrective action taken, and the beginning and ending times for the excursion.

To the extent that an excursion is due to a malfunction, the reporting requirements of 45 CSR 2 Section 9 shall be followed. Ref: 45CSR§2A-7.2.d.

If no exceptions have occurred during the quarter, then a report will be submitted to the OAQ stating so. This will include periods in which no Method 9 tests were conducted (e.g. unit out of service) or when no fuel oil was received.

IV. 45 CSR 10 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

1. 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 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 as set forth below. Ref: 45CSR §10A-7.1.a:

a. $\geq$ 90% of Factor daily

b. $<$ 90% of Factor per shipment

The owner or operator shall provide in the monitoring plan a quality control and quality assurance program for the fuel analysis. If a certified independent laboratory is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory. Ref: 45CSR§10A-7.1.a.1.

- c. The owner/operator of fuel burning units utilizing CEMS shall be exempt from the provisions of 7.1.a and 7.1.b. Ref: 45CSR§10A-7.1.c.

B. Record Maintenance

1. For fuel burning units, and combustion sources, 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, and copies of all reports. Ref: 45CSR§10A-7.1.d.

C. Exception Reporting

1. CEMS – each owner or operator employing CEMS for an approved monitoring plan shall submit a CEMS summary report and/or an excursion report quarterly (within 30 days of end of quarter) to the Director. The Director may request more frequent reports if deemed necessary to assess compliance of the units. The CEMS report shall be submitted in a format approved by the Director, or as specified by the Director. Ref: 45CSR§10A-7.2.a.
 - a. Submittal of 40 CFR Part 75 data in electronic data reporting (EDR) format to the Director shall be deemed to satisfy the requirements of Section 7.2.a. Ref: 45CSR§10A-7.2.a.1
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 shall be submitted. The excursion summary shall be maintained on-site and shall be submitted to the Director upon request. Ref: 45CSR§10A-7.2.a.2.
3. If the total duration of excursions for the reporting period is four percent 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 excursion report shall both be submitted to the Director. Ref: 45CSR§10A-7.2.a.3.
4. The CEMS excursion and monitoring report shall be in format approved by the Director and shall include the following information. Ref: 45CSR10A-7.2.a.4.
 - a. The magnitude of each excursion, and the date and time, including starting and ending times of each excursion. Ref: 45CSR§10A-7.2.a.4.A.
 - b. Specific identification of each excursion that occurs during startups, shutdowns, and malfunctions of the facility. Ref: 45CSR§10A-7.2.a.4.B.

- c. The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted. Ref: 45CSR§10A-7.2.a.4.C.
- 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. Ref: 45CSR§10A-7.2.a.4.D.
- 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. Ref: 45CSR§10A-7.2.a.4.E.

D. Auxiliary Stack (1A) Recordkeeping and Reporting

1. Recordkeeping, and Exception Reporting Requirements: The Harrison Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45CSR§10-8 because the fuel burning unit(s) combust natural gas and/or distillate oil. Ref: 45CSR§10-10.

APPENDIX B

Cross-State Air Pollution Rule Requirements

Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Plant Name: Harrison Power Station	West Virginia ID Number: 033-00015	ORIS/Facility Code: 3944
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1. Owners and operators of the CSAPR subject unit(s) identified in the CSAPR Monitoring Requirements Table below are subject to the requirements of the *CSAPR NO_x Annual Trading Program Requirements*, *CSAPR NO_x Ozone Season Group 2 Trading Program Requirements*, and the *CSAPR SO₂ Group 1 Trading Program Requirements* in Appendix A to this permit.
2. Owners and operators of the CSAPR subject unit(s) identified in the CSAPR Monitoring Requirements Table below are subject to the monitoring requirements specified in the table below.

CSAPR MONITORING REQUIREMENTS TABLE			
Description of Monitoring Requirements:	Parameter		
	SO ₂	NO _x	Heat Input
Unit ID: Unit B1, Unit B2, Unit B3			
Continuous emission monitoring system (CEMS) pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x monitoring)	X	X	X
Excepted monitoring system pursuant to 40 CFR part 75, appendix D (<i>Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units</i>)			
Excepted monitoring system pursuant to 40 CFR part 75, appendix E (<i>Optional NO_x Emissions Protocol for Gas-Fired Peaking Units and Oil-Fired Peaking Units</i>)			
Low Mass Emissions excepted monitoring (LME) pursuant to 40 CFR 75.19 (<i>Optional SO₂, NO_x, and CO₂ Emissions Calculation for Low Mass Emissions (LME) Units</i>)			
EPA-approved alternative monitoring system pursuant to 40 CFR part 75, subpart E			

3. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435, (*CSAPR NO_x Annual Trading Program*), 97.830 through 97.835 (*CSAPR NO_x Ozone Season Group 2 Trading Program*) and, 97.630 through 97.635 (*CSAPR SO₂ Group 1 Trading Program*). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.
4. Owners and operators shall submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable.
5. Owners and operators that want to use an alternative monitoring system shall submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E, 40 CFR 75.66, and the applicable trading program provisions found in 40 CFR 97.435 (*CSAPR NO_x Annual Trading Program*), 97.835 (*CSAPR NO_x Ozone Season Group 2 Trading Program*) and, 97.635 (*CSAPR SO₂ Group 1 Trading Program*). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/complete-list-responses-40-cfr-part-75-petitions>.
6. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (*CSAPR NO_x Annual Trading Program*), 97.830 through 97.834 (*CSAPR NO_x Ozone Season Group 2 Trading Program*) and/or, 97.630 through 97.634 (*CSAPR SO₂ Group 1 Trading Program*) shall submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (*CSAPR NO_x Annual Trading Program*), 97.835 (*CSAPR NO_x Ozone Season Group 2 Trading Program*) and/or 97.635 (*CSAPR SO₂ Group 1 Trading Program*). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <https://www.epa.gov/airmarkets/complete-list-responses-40-cfr-part-75-petitions>.

CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) CSAPR NO_x Annual emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.
 - (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source exceed the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (2) CSAPR NO_x Annual assurance provisions.
 - (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in West Virginia exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for West Virginia and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying:
 - (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in West Virginia for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and

- (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in West Virginia for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in West Virginia during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in West Virginia during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
 - (ii). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of CSAPR NO_x Annual allowances held for compliance.
- (i). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart AAAAA, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.
- (d) Title V permit revision requirements.**
- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
 - (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of

this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.430 through 97.435 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.
- (2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

(1) CSAPR NO_x Ozone Season Group 2 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
- (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source exceed the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.

(2) CSAPR NO_x Ozone Season Group 2 assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for West Virginia and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in West

- Virginia for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
- (B). The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period.
- (iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Ozone Season Group 2 Trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
- (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
- (B). Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (ii). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of CSAPR NO_x Ozone Season Group 2 allowances held for compliance.
- (i). A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
- (ii). A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart EEEEE.
- (6) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR part 97, subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart EEEEE.
- (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.830 through 97.835 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart EEEEE.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- (2) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

(1) CSAPR SO₂ Group 1 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii). If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source exceed the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCC and the Clean Air Act.

(2) CSAPR SO₂ Group 1 assurance provisions.

- (i). If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in West Virginia exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for West Virginia and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in West Virginia for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and

- (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in West Virginia for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in West Virginia during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in West Virginia during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (ii). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of CSAPR SO₂ Group 1 allowances held for compliance.
- (i). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.
- (d) Title V permit revision requirements.**
- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart CCCCC.
 - (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart B of part 75 of

this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.630 through 97.635 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.
- (2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
- (2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

APPENDIX C

Acid Rain Permit



west virginia department of environmental protection
Division of Air Quality

Phase II Acid Rain Permit

Plant Name: Harrison Power Station		Permit #: R33-3944-2027-6
Affected Unit(s): 1, 2, 3		
Operator: Monongahela Power Company		ORIS Code: 3944
Effective Date	From: January 1, 2023	To: December 31, 2027

Contents:

1. Statement of Basis.
2. SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
3. Comments, notes and justifications regarding permit decisions and changes made to permit application forms during the review process, and any additional requirements or conditions.
4. The permit application forms submitted for this source, as corrected by the West Virginia Division of Air Quality. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with W. Va. Code §22-5-4(a)(16) and Titles IV and V of the Clean Air Act, the West Virginia Department of Environmental Protection, Division of Air Quality issues this permit pursuant to 45CSR33 and 45CSR30.

Permit Approval

 **Laura M. Crowder**
Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.
Crowder@dep.gov C = US O = West Virginia Department
of Environmental Protection OU = Division of Air Quality
Date: 2022.12.13 13:49:24 -0500

Laura M. Crowder, Director
Division of Air Quality

December 13, 2022

Date

Promoting a healthy environment

West Virginia Department of Environmental Protection • Division of Air Quality

Plant Name: Harrison Power Station	Permit #: R33-3944-2027-6
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2. SO₂ Allocations and NO_x Requirements for each affected unit

Unit No.	1
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SO ₂ Allowances	Year				
	2023	2024	2025	2026	2027
Table 2 allowances, as adjusted by 40 CFR Part 73	21002	21002	21002	21002	21002
Repowering plan allowances	N/A	N/A	N/A	N/A	N/A
The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO ₂ allowance allocations identified in this permit (See 40 CFR §72.84).					

NO _x Requirements	2023	2024	2025	2026	2027
NO _x Limit (lb/mmBtu)	0.46	0.46	0.46	0.46	0.46
Pursuant to 40 CFR Part 76 and 45CSR33, the West Virginia Department of Environmental Protection, Division of Air Quality approves a NO _x emissions compliance plan for this unit effective for calendar years 2023, 2024, 2025, 2026 and 2027. Under this plan the unit's actual annual average NO _x emission rate shall not exceed the applicable limitation of 0.46 lb/mmBtu as set forth in 40 CFR §76.7(a)(2) for Group 1, Phase II dry bottom wall-fired boilers. In addition to the described NO _x compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO _x compliance plan and requirements covering excess emissions.					

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None.

4. Permit application forms:

Attached.

Approved: December 13, 2022

Harrison – R33-3944-2027-6 – Page 2 of 4

West Virginia Department of Environmental Protection • Division of Air Quality

Plant Name: Harrison Power Station	Permit #: R33-3944-2027-6
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2. SO₂ Allocations and NO_x Requirements for each affected unit

Unit No. **2**

SO ₂ Allowances	Year				
	2023	2024	2025	2026	2027
Table 2 allowances, as adjusted by 40 CFR Part 73	19936	19936	19936	19936	19936
Repowering plan allowances	N/A	N/A	N/A	N/A	N/A
The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO ₂ allowance allocations identified in this permit (See 40 CFR §72.84).					

NO _x Requirements	2023	2024	2025	2026	2027
NO _x Limit (lb/mmBtu)	0.46	0.46	0.46	0.46	0.46
Pursuant to 40 CFR Part 76 and 45CSR33, the West Virginia Department of Environmental Protection, Division of Air Quality approves a NO _x emissions compliance plan for this unit effective for calendar years 2023, 2024, 2025, 2026 and 2027. Under this plan the unit's actual annual average NO _x emission rate shall not exceed the applicable limitation of 0.46 lb/mmBtu as set forth in 40 CFR §76.7(a)(2) for Group 1, Phase II dry bottom wall-fired boilers.					
In addition to the described NO _x compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO _x compliance plan and requirements covering excess emissions.					

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None.

4. Permit application forms:

Attached.

Approved: December 13, 2022

Harrison – R33-3944-2027-6 – Page 3 of 4

West Virginia Department of Environmental Protection • Division of Air Quality

Plant Name: Harrison Power Station	Permit #: R33-3944-2027-6
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2. **SO₂ Allocations and NO_x Requirements for each affected unit**

Unit No. 3

SO ₂ Allowances	Year				
	2023	2024	2025	2026	2027
Table 2 allowances, as adjusted by 40 CFR Part 73	17928	17928	17928	17928	17928
Repowering plan allowances	N/A	N/A	N/A	N/A	N/A
The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO ₂ allowance allocations identified in this permit (See 40 CFR §72.84).					

NO _x Requirements	2023	2024	2025	2026	2027
NO _x Limit (lb/mmBtu)	0.46	0.46	0.46	0.46	0.46
Pursuant to 40 CFR Part 76 and 45CSR33, the West Virginia Department of Environmental Protection, Division of Air Quality approves a NO _x emissions compliance plan for this unit effective for calendar years 2023, 2024, 2025, 2026 and 2027. Under this plan the unit's actual annual average NO _x emission rate shall not exceed the applicable limitation of 0.46 lb/mmBtu as set forth in 40 CFR §76.7(a)(2) for Group 1, Phase II dry bottom wall-fired boilers.					
In addition to the described NO _x compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO _x compliance plan and requirements covering excess emissions.					

3. **Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:**

None.

4. **Permit application forms:**

Attached.



OMB No. 2060-0258
Approval expires 12/31/2021

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

Identify the facility name,
State, and plant (ÖRIS) code.

Harrison Power Station	West Virginia	3944
Facility (Source) Name	State	Plant Code

Enter the unit ID# for every affected unit at the affected source in column "a."

[illegible]

Harrison Power Station Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

STEP 3

Permit Requirements

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Harrison Power Station Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

STEP 3, Cont'd.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Harrison Power Station
Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

**Read the
certification
statement, sign,
and date.**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name **David Frederick, Designated Representative**

Signature



Date **06/16/2022**



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 12/31/2021

Acid Rain NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is: ☐ New ☒ Revised

Page 1 of 2

STEP 1

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Harrison Power Station	WV	3944
Plant Name	State	Plant Code

STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	1	2	3			
	ID#	ID#	ID#	ID#	ID#	ID#
	DBW	DBW	DBW			
	Type	Type	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	X	X	X			
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						
(i) NO _x Averaging Plan (include NO _x Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging form)						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

EPA Form 7610-28 (Revised 8-2019)

Harrison Power Station

Plant Name (from Step 1)

NO_x Compliance • Page 2

Page 2 of 2

STEP 3

Identify the first calendar year in which this plan will apply.

January 1, 2023

STEP 4

Read the special provisions and certification, enter the name of the designated representative, sign and date.

Special Provisions

General

This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name David Frederick, Designated Representative

Signature



Date 06/16/2022

APPENDIX D

40 CFR 63 Subpart UUUUU Averaging Plan



December 17, 2015

Mr. William F. Durham, Director
Division of Air Quality
West Virginia Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Dear Mr. Durham:

Re: Monongahela Power Company – Harrison Power Station
40 CFR Part 63, Subpart UUUUU, Averaging Plan, Section 63.10009(j)
Mercury (Hg), Particulate Matter (PM) and Hydrogen Chloride (HCl)

033-00015 40CFR63, UUUUU
Reg. 34/11/14 MATS
FUELS ENERGY
HARRISON
RMC

The Harrison plant is a coal-fired facility and is classified as a major source under Title V for criteria pollutants, as well as for hazardous air pollutants, and is therefore subject to the MATS rule. The plant includes three (3) steam electric generating units and associated facilities providing approximately 1,984 net megawatts (MW) of coal-fired electric generating capacity. Harrison Unit 1 is nominally rated at 662 MW (net), and went on line in 1972, while Units 2 and 3 are each nominally rated at 661 MW (net), and came on line in 1973 and 1974, respectively. Each of the boilers are equipped with PM, nitrogen oxides (NO_x), and sulfur dioxide (SO₂) controls.

The Monongahela Power Company (MP) submits the following averaging plan for Particulate Matter (PM), Hydrochloric Acid (HCl) and Mercury (Hg) under the Mercury and Air Toxics Standard (MATS), 40 CFR Part 63, Subpart UUUUU, for the Harrison Power Station (Harrison) in Haywood, WV. The MATS compliance date for Harrison is April 16, 2016. This averaging plan is being submitted more than 120 days in advance of that compliance date as required by MATS. The averaging plan will utilize the flexibility offered by the regulation's Table 2, allowing a source to use PM stack testing as a surrogate for hazardous air pollutants (HAPs) metals, stack testing for HCl, continuous emissions monitors (CEMs) or Sorbent Trap Monitoring System for Hg, and to use either heat input (lb/MMBtu) or electrical output (lb/MWh) as a weighting parameter. MP will only utilize an averaging plan for Hg provided there is no reduction in the group MATS limits for the 30-day averaging period as currently proposed by the Technical Corrections and Clarifications (1.2 lbs/TBtu and 0.013 lb/GWh). MP will elect not to use the averaging plan if these limits are reduced.

MP will conduct continuous monitoring for Hg, and conduct quarterly stack testing for PM and HCl on the three (3) stacks (flues) at the Harrison plant. The flue gases from Boilers 1, 2, and 3 are each routed through dedicated selective catalytic reduction (SCRs), electrostatic precipitators (ESPs), through wet scrubbing systems (WFGDs) and out through individual stack linings contained within a single concrete structure. Each unit is also equipped with low-NO_x burners

Mr. William F. Durham, Director
Page 2
December 17, 2015

(LNB). The group average PM, Hg, and HCl rates will be determined by process-weighting as described in Section 63.10009(b) Equations to demonstrate compliance with MATS limitations.

Section 63.10009(j) requires that MP submit the following data as part of this averaging plan:

(j)(i): (Identification of existing equipment)

- Unit 1 (Source ID - Unit B1), ESP-1: 1972; FGD-1: 1994; SCR-1: 2003
- Unit 2 (Source ID - Unit B2), ESP-2: 1973; FGD-2: 1995; SCR-2: 2003
- Unit 3 (Source ID - Unit B3), ESP-3: 1974; FGD-3: 1995; SCR-3: 2003

(j)(ii): (process weighting parameter)

- The “process weighting parameter” will be either heat input (lb/MMBtu) or gross electrical output (lb/MWh).

(j)(iii): (PM, Hg and HCl controls)

- Unit 1 (Source ID - Unit B1), ESP-1: 1972; FGD-1: 1994; SCR-1: 2003
- Unit 2 (Source ID - Unit B2), ESP-2: 1973; FGD-2: 1995; SCR-2: 2003
- Unit 3 (Source ID - Unit B3), ESP-3: 1974; FGD-3: 1995; SCR-3: 2003

(j)(iv): (Filterable PM)

- Method 1 at Appendix A-1 to 40 CFR Part 60;
- Methods 2, 2A, 2C, 2G, 2F, or 2H at Appendix A-1 or A-2 of 40 CFR Part 60;
- Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10-1981;
- Method 4 at Appendix A-3 to 40 CFR Part 60;
- Method 5 at Appendix A-3 of 40 CFR Part 60. Note that the Method 5 front half temperatures shall be $160^{\circ} \pm 14^{\circ} \text{C}$ ($320^{\circ} \pm 25^{\circ} \text{F}$);
- Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60, or calculate using mass emissions rate and electrical output data;
- Or as changed by regulations or approved by the Administrator.

(j)(iv): (HCl)

- Method 1 at Appendix A-1 to 40 CFR Part 60.
- Methods 2, 2A, 2C, 2F, 2G, or 2H at Appendix A-1 or A-2 to 40 CFR Part 60.
- Method 3A or 3B at Appendix A-2 to 40 CFR Part 60, or ANSI/ASME PTC 19.10-1981.
- Method 4 at Appendix A-3 to 40 CFR Part 60.
- Method 26A at Appendix A-8 to 40 CFR Part 60 or Method 320 at Appendix A to 40 CFR Part 63 or ASTM 6348-033 with (1) additional quality assurance measures in footnote 4 and (2) spiking levels nominally no greater than two times the level

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corresponding to the applicable emission limit. Method 26A must be used if there are entrained water droplets in the exhaust stream.

- Or as changed by the regulations or approved by the Administrator

(j)(iv): (Hg)

- Hg CEMs in accordance with Appendix A of 40 CFR Part 63, Subpart UUUUU,
- In the process of installing an Emergency Backup Sorbent Trap Monitoring System in accordance with Appendix A of 40 CFR 63 Subpart UUUUU.
- Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems in accordance with 40 CFR Part 75 and 40 CFR 63.10010(a), (b), (c), and (d),
- Convert hourly emissions concentrations to 30-boiler operating day rolling average lb/TBtu or lb/GWh emissions rates, in accordance with Section 6 of Appendix A of 40 CFR Part 63, Subpart UUUUU,
- Or as changed by the regulations or approved by the Administrator

(j)(v): (Demonstration – HCl, filterable PM and Hg)

- The emissions averaging for HCl, filterable PM and Hg will be per Section 63.10009(b)(1) – *Group Eligibility Equations*, using Eq. 1a:

$$WAERM = \frac{[\sum_{i=1}^p [\sum_{n=1}^n (Herm_i \times Rmm_i)]_p] + \sum_{i=1}^m (Ter_i \times Rmt_i)}{[\sum_{i=1}^p [\sum_{n=1}^n Rmm_i]_p] + \sum_{i=1}^m Rmt_i} \quad (Eq. 1a)$$

Where:

$WAERM$ = Weighted average emissions rate maximum in terms of lb/heat input or lb/gross electrical output;

$Herm_i$ = Hourly emissions rate (e.g., lb/TBtu, lb/GWh) from CEMs or sorbent trap monitoring for hour i ;

Rmm_i = Maximum rated heat input (e.g., MMBtu/hr) or gross electrical output (e.g., MWh) of unit 'i' in terms of heat input or gross electrical output;

p = number of EGUs in emissions averaging group that rely on CEMs;

n = number of hourly rates collected over 30-group boiler operating days;

Ter_i = Emissions rate from most recent test of unit i in terms of lb/heat input or lb/gross electrical output;

Rmt_i = Maximum rated heat input or gross electrical output of unit 'i' in terms of lb/heat input or lb/gross electrical output; and,

m = number of EGUs in emissions averaging group that rely on emissions testing.

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- The most recent set of representative investigative stack test results for HCl on Unit 1 (8/18/2015), Unit 2 (5/7/2015) and Unit 3 (4/16/2015) demonstrate the validity of this averaging plan:

'Units 1-3' $WAER_m$ (lb/MMBtu) = $((7,583 \text{ MMBtu/hr} \times 0.00047 \text{ lb/MMBtu}) + (7,500 \text{ MMBtu/hr} \times 0.00019 \text{ lb/MMBtu}) + (7,700 \text{ MMBtu/hr} \times 0.00038 \text{ lb/MMBtu}) + 0) / ((7,583 \text{ MMBtu/hr} + 7,500 \text{ MMBtu/hr} + 7,700 \text{ MMBtu/hr}) + 0) = \underline{0.00035 \text{ lb/MMBtu}}$
MATS HCl limit = 0.002 lb/MMBtu

'Units 1-3' $WAER_m$ (lb/MWh) = $((713 \text{ MWh} \times 0.00499 \text{ lb/MWh}) + (710 \text{ MWh} \times 0.00187 \text{ lb/MWh}) + (711 \text{ MWh} \times 0.00404 \text{ lb/MWh}) + 0) / ((713 \text{ MWh} + 710 \text{ MWh} + 711 \text{ MWh}) + 0) = \underline{0.00364 \text{ lb/MWh}}$; MATS HCl limit = 0.02 lb/MWh

Averaging Calculation '1', '2' & '3'			
HCl		lb/MMBtu	lb/MWg
Limit		0.002	0.020
WAER_m		0.00035	0.00364
Hermi	n/a		
Rmm		mmBtu/hr	MW
1		7,583	713
2		7,500	710
3		7,700	711
p	0		
n	n/a		
Ter		#/mmBtu	#/MW
1		0.00047	0.004993
2		0.00019	0.001870
3		0.00038	0.004040
Rmt		mmBtu/hr	MW
1		7,583	713
2		7,500	710
3		7,700	711
m	3		

Table 1 - HCl Group Averaging Calculation

- The most recent set of representative investigative stack test results for filterable PM on Unit 1 (11/20/2015), Unit 2 (11/20/2015) and Unit 3 (4/16/2015) demonstrate the validity of this averaging plan:

'Units 1-3' $WAER_m$ (lb/MMBtu) = $((7,583 \text{ MMBtu/hr} \times 0.01724 \text{ lb/MMBtu}) + (7,500 \text{ MMBtu/hr} \times 0.01678 \text{ lb/MMBtu}) + (7,700 \text{ MMBtu/hr} \times 0.010 \text{ lb/MMBtu}) + 0) / ((7,583$

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$\text{MMBtu/hr} + 7,500 \text{ MMBtu/hr} + 7,700 \text{ MMBtu/hr} + 0) = \underline{\underline{0.0146 \text{ lb/MMBtu}}}$; MATS PM limit = 0.030 lb/MMBtu

'Units 1-3' $WAER_m$ (lb/MWh) = $((713 \text{ MWh} \times 0.16605 \text{ lb/MWh}) + (710 \text{ MWh} \times 0.18028 \text{ lb/MWh}) + (711 \text{ MWh} \times 0.10843 \text{ lb/MWh}) + 0) / ((713 \text{ MWh} + 710 \text{ MWh} + 711 \text{ MWh}) + 0) = \underline{\underline{0.152 \text{ lb/MWh}}}$; MATS PM limit = 0.30 lb/MWh

Averaging Calculation '1', '2' & '3'			
PM		lb/MMBtu	lb/MWg
Limit		0.030	0.300
WAER _m		0.0146	0.152
Hermi	n/a		
R _{mm}		mmBtu/hr	MW
1		7,583	713
2		7,500	710
3		7,700	711
p	0		
n	n/a		
Ter		lb/MMBtu	lb/MWh
1		0.01724	0.16605
2		0.01678	0.18028
3		0.01	0.10843
R _{mt}		mmBtu/hr	MW
1		7,583	713
2		7,500	710
3		7,700	711
m	3		

Table 2 - PM Group Averaging Calculation

- MP will use an averaging plan to demonstrate mercury compliance provided there is no reduction in the proposed mercury limits as proposed by the Technical Corrections & Clarifications. The most recent and representative 30-day set of CEMs results for Hg from Units 1, 2 and 3 (11/1/2015 through 11/30/2015) demonstrate the validity of this averaging plan:
- 'Units 1-3' $WAER_m$ (lb/TBtu) = $((0.007583 \text{ TBtu/hr} \times 0.885 \text{ lb/TBtu}) + (0.007500 \text{ TBtu/hr} \times 0.4195 \text{ lb/TBtu}) + (0.007700 \text{ TBtu/hr} \times 0.4017 \text{ lb/TBtu}) + 0) / ((0.007583 \text{ TBtu/hr} + 0.007500 \text{ TBtu/hr} + 0.007700 \text{ TBtu/hr}) + 0) = 0.568 \text{ lb/TBtu}$; MATS 30-Day Hg limit = 1.2 lb/TBtu

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*Units 1-3' $WAER_m(\text{lb/GWh}) = ((0.713 \text{ GWh} \times 0.0072 \text{ lb/GWh}) + (0.710 \text{ GWh} \times 0.0038 \text{ lb/GWh}) + (0.711 \text{ GWh} \times 0.0039 \text{ lb/GWh}) / ((0.713 \text{ GWh} + 0.710 \text{ GWh} + 0.711 \text{ GWh}) + 0) = 0.005 \text{ lb/GWh}$; MATS 30-Day Hg limit = 0.013 lb/GWh

Averaging Calculation '1', '2' & '3'			
Hg		lb/TBtu	lb/GWhg
Limit		1.2	0.013
WAERm		0.568	0.005
Heri		B/TBtu	#/GW
1		0.8850	0.0072
2		0.4195	0.0038
3		0.4017	0.0039
Rmi		TBtu/hr	GW
1		0.007583	0.713
2		0.007500	0.710
3		0.007700	0.711
p	3		
n	684		
Ter	n/a		
m	n/a		

Table 3 - Hg Group Averaging Calculation

If you should have any questions concerning this averaging plan, please feel free to contact Mr. Donald Hromulak at (330) 436-2781, or me at (330) 315-7342.

Sincerely,



Raymond L. Evans
Vice President
Environmental and Technologies

By UPS Next Day Air
cc: RMChakrabarty, WVDEP Charleston WV
LPNichols, CAMD-USEPA

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