West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Ashland LLC
Neal Plant
R30-09900009-2017

William F. Durham
Director

Issued: August 10, 2017 • Effective: August 24, 2017
Expiration: August 10, 2022 • Renewal Application Due: February 10, 2022

Permit Number: **R30-09900009-2017**
Permittee: **Ashland LLC**
Facility Name: **Neal Plant**
Permittee Mailing Address: **100 Big Sandy River Road, Kenova WV 25530**

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:	Neal, Wayne County, West Virginia
Telephone Number:	(304) 528-2600
Type of Business Entity:	Corporation
Facility Description:	Maleic anhydride production
SIC Codes:	2865
UTM Coordinates:	360.8 km Easting • 4,247.7 km Northing • Zone 17

Permit Writer: Natalya V. Chertkovsky-Veselova

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 Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed/ Modified
Maleic Anhydride Reactors					
11E / 011	Thermal Oxidizer B-800	001-02	Maleic Anhydride Reactor D-208	141 Million pounds per year of Maleic Anhydride	12/30/1993 / 1998
		001-03	Maleic Anhydride Reactor D-209		01/05/1988 / 1998
		001-04	Maleic Anhydride Reactor D-210		09/30/1976 / 1998
		001-05	Maleic Anhydride Reactor D-211		09/30/1976 / 1998
		001-06	Maleic Acid Scrubber D-320		1975 / 2001
		002-01	Batch Maleic Anhydride Refiner D-410		09/30/1976 / 1998
13E / 010	Abatement Scrubber D-330	001-02	Maleic Anhydride Reactor D-208	141 Million pounds per year of Maleic Anhydride	12/30/1993 / 1998
		001-03	Maleic Anhydride Reactor D-209		01/05/1988 / 1998
		001-04	Maleic Anhydride Reactor D-210		09/30/1976 / 1998 11/2017
		001-05	Maleic Anhydride Reactor D-211		09/30/1976 / 1998
		001-06	Maleic Acid Scrubber D-320		1975 / 2001
		002-01	Batch Maleic Anhydride Refiner D-410		09/30/1976 / 1998
Storage Tanks					
1E / 001	Scrubber D-400	003-01	Forecut Tank F-400	15,231 gal (2,500,000 gal/yr)	09/30/1976 / 1998
		003-04	Crude MAN Tank F-330	51,700 gal (9,000,000 gal/yr)	10/02/1994 / 1998
2E / 002	None	003-02	Xylene Cut Tank F-413	16,900 gal (4,400,000 gal/yr)	09/30/1976 / 1998
3E / 003	Scrubber D-412	003-03	MAN Product Tank F-412	51,700 gal (28,500,000 gal/yr)	09/30/1976 / 1998

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed/ Modified
5E / 005	None	003-05	Waste Maleic Acid Tank M-1410A	18,000 gal (1,500,000 gal/yr)	09/30/1976 / 1998
6E / 006	None	003-06	Waste Maleic Acid Tank M-1410B	18,000 gal (1,500,000 gal/yr)	09/30/1976 / 1998
7E / 007	Vent Condenser RFG-414	003-07	Process Water Tank F-414	62,500 gal (14,000,000 gal/yr)	09/30/1976 / 1998
10E / 010	Scrubber D-600	005-01,02	MAN Truck and Rail Loading	17,750,000 gal/yr	09/30/1976 / 1998
15E / 015	Scrubber D-601	003-08	MAN Product Storage Tank F-601	156,100 gal (11,000,000 gal/yr)	09/30/1976 / 1998 / 10/31/2014
		003-09	MAN Product Storage Tank F-602	156,100 gal (11,000,000 gal/yr)	09/30/1976 / 1998
None	LDAR	004-01	Pressurized Butane Tank TK-101	31,900 gal	09/30/1976 / 1998
			Pressurized Butane Tank TK-102	31,900 gal	09/30/1976 / 1998
			Pressurized Butane Tank TK-103	44,500 gal	1982 / 1998
None	Full Enclosure ("Dog House")	005-03	Reactors Catalyst Exchanges Fugitive Emissions	Not rated	1975
None	LDAR	006-01	Fuel Gas System Fugitive Emissions	Not rated	03/05/1988 / 1998
None	LDAR	007-01	Process Fugitive Emissions	Not rated	1976 / 1998
17E - 56E	None	008-01 – 008-40	40 Portable Diesel Fuel Fired Air Compressors	76.3 hp each	2016
Control Devices					
11E / 011	N/A	See above	Thermal oxidizer B-800	30 MM BTU/hr	1988
10E / 010	N/A	See above	MAN Loading Scrubber D-600	90% eff.	1989
3E / 003	N/A	See above	Wet Scrubber D-412	90% eff.	1995
13E / 010	N/A	See above	Abatement Wet Scrubber D-330	95% eff.	1976
7E / 007	N/A	See above	Refrigerated Vent Condenser RFG-414	96% eff. , 48 MBTU/hr	1997

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed/ Modified
1E / 001	N/A	See above	Scrubber D-400	90% eff.	1996
15E / 015	N/A	See above	Scrubber D-601	90% eff.	1999

1.2. Active R13, R14, and R19 Permits

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

Permit Number	Date of Issuance
R14-0008K	May 5, 2006
R13-3297T*	March 10, 2016

*Extended expiration date: September 12, 2017

2.0 General Conditions

2.1. Definitions

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

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

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

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

2.2. Acronyms

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

2.3. Permit Expiration and Renewal

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

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

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

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

2.4. Permit Actions

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

2.5. Reopening for Cause

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

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

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

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

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

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

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

2.10. Off-Permit Changes

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

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

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

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

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

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

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

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

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

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

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

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

[45CSR§30-5.8.c.]

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

2.12. Reasonably Anticipated Operating Scenarios

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

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

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

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

[45CSR§30-5.1.i.]

2.13. Duty to Comply

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

2.14. Inspection and Entry

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

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

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

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

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

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

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

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

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

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

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

2.17. Emergency

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

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

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

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

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

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

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. **[45CSR§30-5.7.c.]**

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

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

2.18. Federally-Enforceable Requirements

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

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

2.19. Duty to Provide Information

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

2.20. Duty to Supplement and Correct Information

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

2.21. Permit Shield

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

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

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

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

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

[45CSR§30-5.6.c.]

2.22. Credible Evidence

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

2.23. Severability

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

2.24. Property Rights

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

2.25. Acid Deposition Control

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

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

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

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

[45CSR§30-5.1.d.]

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

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

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

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

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

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

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

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

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

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

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

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
[40 C.F.R. 82, Subpart F]

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

3.1.9. The production of maleic anhydride (MAN) shall be limited to 141 million pounds per year.
[45CSR14, R14-0008, A.1]

3.1.10. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1]

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

3.1.12. Streamlined Leak Detection and Repair (LDAR) Program.

a. The permittee shall comply with all applicable requirements of Subpart VV of 40 CFR 60 (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry) for the four maleic anhydride reactors D-208, D-209, D-210 and D-211, and all associated equipment such as pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, and flanges or other connectors in VOC service.
[45CSR14, R14-0008, B.9]

b. The permittee shall maintain a Leak Detection and Repair (LDAR) program which complies with the requirements of Section 37 of 45CSR21 for all sources subject to Section 37 of 45CSR21 at the facility.
[45CSR14, R14-0008, B.11; State-Enforceable Only]

c. Compliance with the following Streamlined LDAR Program will assure compliance with both 40 CFR 60 Subpart VV and Section 37 of 45CSR21:

Standards: General per 40 CFR §60.**482**-1.

Pump in light liquid service per 40 CFR §§60.**482**-2 (a) through (g).

Compressors per 40 CFR §§60.**482**-3 (a) through (j).

Pressure relief devices per 40 CFR §§60.**482**-4 (a) through (d), 45CSR§21-37.4(a)(5), (e).

Sampling connection systems per 40 CFR §§60.**482**-5 (a), (b)(1) through b(4), (c).

Open-ended valves or lines per 40 CFR §§60.482-6 (a) through (e).

Valves in gas/vapor service in light liquid service per 40 CFR §60.482-7.

Pumps and valves in heavy liquid service, pressure relief devices in light liquid service or heavy liquid service, and flanges and other connectors per 40 CFR §§60.482-8 (a)(1) through (a)(2), (b) through (d).

Delay of repair per 40 CFR §60.482-9 and 45CSR§21-37.8(c).

Closed vent systems and control devices per 40 CFR§60.482-10.

Alternative Standards for valves - Allowable percentage of valves leaking per 40 CFR 60 §483-1.

Alternative standards for valves--skip period leak detection and repair 40 CFR §60.483 -2.
Equivalence of means of emission limitation per 40 CFR§60.484.

Test methods and procedures per 40 CFR §60.485 and 45CSR§§21-46.3, 46.4

Recordkeeping requirements: 40 CFR §60.486.

Reporting requirements 40 CFR §60.487.

Reconstruction: 40 CFR §60.488.

List of chemicals produced by affected facilities 40 CFR §60. 489.

d. Copies of the semiannual reports to the EPA Administrator that are required under Subpart VV shall also be sent to the Director of the Division of Air Quality.

[45CSR§30-5.1.c]

3.1.13. Streamlined Air Oxidation Unit Processes Program:

a. The permittee shall comply with all applicable requirements of Subpart III of 40 CFR 60 Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes for the four maleic anhydride reactors D-208, D-209, D-210 and D-211 and associated product recovery equipment.
[45CSR14 R14-0008, B.10]

b. The permittee shall comply with all applicable requirements of Section 39 of 45CSR21 and any more stringent requirements as may be set forth under Sections 4.1.1-4.1.5, 4.2.1, 5.1.1-5.1.8, 5.1.10 – 5.1.14 of this permit.
[45CSR14, R14-0008, B.10]

c. Compliance with the following streamlined Air Oxidation Unit Processes Program will assure compliance with both 40 CFR 60 Subpart III and Section 39 of 45CSR21:

Standards per 40CFR§60.612(a).
Monitoring of emissions and operations per 40 CFR §§60.613(a)(1), (a)(2) and (f) alternative:
The permittee shall utilize the data generated from the reactor air flow indicators and the bypass electronic valve positioner leading to the abatement scrubber and the incinerator as an alternative means of monitoring the vent stream flow to the thermal oxidizer as outlined in the Equivalency

Determination Request Approval from the USEPA dated December 5, 1997. This letter is included as Appendix A.
Test methods and procedures per 40 CFR §§60.614(a), (b)(1) through (b)(4)(iv).
Recordkeeping requirements per 40 CFR§§60.615(a), (b)(1)(i) through (b)(1)(ii), (c)(1), (d).
Reporting requirements per 40 CFR §§60.615(i), (j)(1) through (j)(2), (k) through (l) and 45CSR§21-39.7.

[45CSR14, R14-0008, B.10]

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

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

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

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

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

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

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

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

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

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

3.4. Recordkeeping Requirements

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

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

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

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

[45CSR§30-5.1.c.2.A.]

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. Records shall be maintained stating the dates and times any fugitive particulate emission control systems were inoperable, and the corrective actions taken to repair these systems.
[45CSR§30-5.1.c]

3.4.5. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility.
[45CSR§30-5.1.c]

3.4.6. The following information shall be recorded and maintained on-site by the permittee for a period of at least five (5) years and such records shall be made available to the Director or his duly authorized representative upon request:

a. the pounds of maleic anhydride (MAN) that are produced each month
[45CSR14, R14-0008, B.1.a]

b. twelve-month rolling annual production rate;
[45CSR§30-5.1.c]

A "Certification of Data Accuracy Form" must be completed and accompany the records (described in 3.4.6.a. above) requested by the Director or his duly authorized representative, and all periodic reports that are required to be submitted to the Division of Air Quality.
[45CSR14 R14-0008, B.1]

3.5. Reporting Requirements

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

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

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

DAQ:

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

US EPA:

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

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

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

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

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

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

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

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

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

3.5.8. **Deviations.**

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

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

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

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

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

[45CSR§30-5.1.c.3.C.]

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

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

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

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

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

a. 40 C.F.R. 60 Subpart E - *Standards of Performance for Incinerators*. The Neal plant Incinerator is not used to burn solid waste.

b. 40 C.F.R. 60 Subpart K - *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after June 11, 1973 and prior to May 19, 1978* – there are no petroleum liquid storage tanks in the Neal plant.

c. 40 C.F.R. 60 Subpart Ka - *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after May 18, 1978 and prior to July 23, 1984* – there are no petroleum liquid storage tanks in the Neal plant.

d. 40 C.F.R. 60 Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984.* Per 40CFR§§60.110b(b) and (d)(2) the Subpart doesn't apply to the facility. Tanks F-400, F-330, F-412, F-413, M-1410A, M-1410B, F-414, F-601, F-602 are not subject to this Subpart because of their size/true vapor pressure characteristics. Butane pressure vessels TK-101, TK-102, TK-103 are exempted from the requirements of this Subpart, because they are designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

e. 40 C.F.R. 60 Subpart DDD - *Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry*. The Neal plant does not produce polymers.

f. 40 C.F.R. 60 Subpart NNN - *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations*. The Neal plant's distillation process is designed and operated as a batch operation, so it is exempted per section 60.660 (c) (3).

g. 40 C.F.R. 60 Subpart RRR - *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes*. The Neal plant is manufacturing maleic anhydride by air oxidation process, so it is not subject to this Subpart, but is subject to Subpart III instead.

h. 40 C.F.R. 60 Subpart DDDD - *Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999* - the Neal plant incinerator is not used to burn solid waste.

i. 40 C.F.R. 61 Subpart FF - *National Emission Standard for Benzene Waste Operations.* The Neal plant has benzene waste in gas/vapor form only, therefore the plant is exempt from requirements of this subpart per §61.340(c)(1).

j. 40 C.F.R. 61 Subpart J - *National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene.* The Neal plant does not operate in "benzene service", because its equipment contacts a fluid that contains less than 10 percent benzene by weight. The raw butane feed into the system contains less than 1 percent benzene by weight; then before reaction process butane flow gets diluted with air at more than 50 to 1 dilution rate, so benzene content of the process fluid drops even less. Facility is required to keep on site the quarterly butane analysis to demonstrate compliance with the process fluid benzene content.

k. 40 C.F.R. 61 Subpart BB - *National Emission Standard for benzene emissions from Benzene Transfer operations.* The Neal plant is not subject to this subpart, because it is not a benzene production facility or a bulk terminal.

l. 40 C.F.R. 63 Subpart A - *National Emission Standards for Hazardous Air Pollutants for Source Categories. General Provisions.* This subpart is not applicable because the Neal plant is not a major source of HAPs (facility has aggregate HAP emissions less than 25 TPY and single HAP emissions less than 10 TPY at maximum operating conditions).

m. 40 C.F.R. 63 Subpart B - *Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)*
This subpart is not applicable because the Neal plant is not a major source of HAPs.

n. 40 C.F.R. 63 Subpart F - *National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry.* This subpart is not applicable because the Neal plant is not a major source of HAPs.

o. 40 C.F.R. 63 Subparts G - *National Emission Standards for Organic Hazardous Air Pollutants for Synthetic Organic Chemical Manufacturing.* The Neal plant is not subject to these subparts, because the plant is not a major source of HAPs.

p. 40 C.F.R. 63 Subpart H - *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.* This subpart is not applicable because the Neal plant is not a major source of HAPs.

q. 40 C.F.R. 63 Subpart I - *National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks.* The Neal plant is not a major source of HAPs, therefore the Subpart is not applicable.

r. 40 C.F.R. 63 Subpart Q - *National Emission Standards for Organic Hazardous Air Pollutants for Industrial Process Cooling Towers.* The Neal plant cooling towers are not subject to this subpart, because the plant is not a major source of HAPs.

s. 40 C.F.R. 63 Subpart EEEE - *National Emission Standards for Organic Hazardous Air Pollutants for Organic Liquid Distribution (non-Gasoline).* The Neal plant is not a major source of HAPs, therefore the Subpart is not applicable.

t. 40 C.F.R. 63 Subpart FFFF - *National Emission Standards for Organic Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing.* The Neal plant is not a major source of HAPs, therefore the Subpart is not applicable.

u. 40 C.F.R. 63 Subpart DDDDD - *National Emission Standards for Organic Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters.* The Neal plant is not a major source of HAPs, therefore the Subpart is not applicable.

v. 45 C.S.R. 27 - *To Prevent and Control the Emissions of Toxic Air Pollutants.* The Neal plant is not subject to this rule, because its benzene emission rate is less than 1000 lbs/yr.

4.0 Maleic Anhydride Reactors Requirements (Emission Points 11E and 13E)

4.1. Limitations and Standards

4.1.1. Hourly emissions to the atmosphere from Emission Point Number 11E (the stack exhausting the thermal oxidizer B-800) and annual combined emissions to the atmosphere from Emission Points Number 11E (the stack exhausting the thermal oxidizer B-800) and 13E (the stack exhausting the abatement scrubber D-330) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates	
	Pounds per Hour	Tons per Year
Carbon Monoxide [1]	445.0	598.0
Oxides of Nitrogen	3.0	13.2
Particulate Matter	0.22	0.9
Sulfur Dioxide	5.48	9.5
Volatile Organic Compounds	26.2	69.0
Acrylic Acid	-----	5.41
Benzene	0.12	0.22
Xylene	-----	5.59

[1] Compliance with the hourly emission limit is based upon calendar daily average emissions as measured by the carbon monoxide continuous emission monitoring equipment. See 4.4.1.b for further details.

[45CSR14, R14-0008, A.2]

4.1.2. Emissions generated from the operation of the reactors (identified as D-208, D-209, D-210, D-211), the maleic acid scrubber (D-320), and the batch refiner (D-410) shall be routed to the plant's thermal oxidizer B-800 at all times, except as provided in Section 4.1.3 of this permit.
[45CSR14, R14-0008, A.2]

4.1.3. Emissions generated from operation of the reactors (identified as D-208, D-209, D-210, D-211), the maleic acid scrubber (D-320), and the batch refiner (D-410) shall be routed to the plant emission abatement scrubber D-330 at all times when the plant thermal oxidizer is out of service. Operation hours of the abatement scrubber (D-330) shall not exceed 400 reactor hours per year. During the period that emissions generated from operation of the reactors, the maleic acid scrubber, and the batch refiner are being routed to the plant emission abatement scrubber (D-330), only two of the four maleic anhydride process reactors (identified as D-208, D-209, D-210, and D-211) shall be operated except as noted in the following paragraph.

The permittee may attempt up to three restart procedures of the thermal oxidizer. If the thermal oxidizer cannot effectively be restarted, the permittee shall initiate actions to operate only two of the four maleic anhydride process reactors.
[45CSR14, R14-0008, A.2]

4.1.4. When the thermal oxidizer is being used to show compliance with Section 4.1.1, the plant thermal oxidizer shall be operated such that the average combustion temperature does not drop more than 50°F below the average point established during the most recent thermal oxidizer performance test for periods of time which

do not exceed three (3) hours. This requirement shall only apply during those times that vapors from the reactors or batch refiner are present.
[45CSR14, R14-0008, A.12]

4.1.5. The maximum sulfur content of the incoming raw material butane combusted in the thermal oxidizer (emission point 11E) shall not exceed 140 parts per million (ppm). The maximum annual average sulfur content of the incoming raw material butane shall not exceed 58 ppm.
[45CSR14 R14-0008, A.18]

4.1.6. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater. (Thermal oxidizer, Emission Point 11E).
[45CSR§6-4.3 and 45CSR14, R14-0008, B.12]

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

Compliance with the PTE limit for SO_2 set forth under Section 4.1.1 of this permit assures compliance with the 2000 ppmv limit above.
[45CSR14, R14-0008, B.3 and 45CSR§10-4.1]

4.1.8. Particulate emissions from the thermal oxidizer shall not exceed the limitations of 45CSR§6-4.1, except that compliance with any more stringent limitation set forth under Section 4.1.1 of this permit shall be demonstrated.

Compliance with the PM Emissions limitation set forth under Section 4.1.1 of this permit assures compliance with the PM Emissions limitations of 45CSR6.

[45CSR14, R14-0008, B.12 and 45CSR§6-4.1]

4.2. Monitoring Requirements

4.2.1. Compliance with the carbon monoxide (CO) emissions to the atmosphere from Emission Point Number 11E shall be demonstrated by monitoring CO emissions at all times during operation of the thermal oxidizer using the continuous emission monitoring (CEM) equipment that is installed in the stack which exhausts the plant thermal oxidizer. Compliance with the limit on volatile organic compounds (VOC) emissions to the atmosphere from Emission Point 11E shall be demonstrated by monitoring the thermal oxidizer average combustion temperature at all times during the operation of the thermal oxidizer in accordance with Section 4.1.4.
[45CSR14, R14-0008, A.3 and 45CSR§30-12.7]

4.2.2. The permittee shall comply with the following approved amended SO_2 Monitoring plan (per 45CSR§10-8.2.c and 45CSR§10A-6.1):

a. For the butane burned in the thermal oxidizer:

1. In order to demonstrate compliance with the maximum sulfur contents of the incoming raw material butane combusted in the thermal oxidizer as set forth in the Section 4.1.5. of this Permit, a monthly sulfur analysis supplied by each of the butane vendors shall be obtained, and maximum annual average sulfur content of the butane shall be calculated monthly based on the sulfur analysis; each case of the exceedance of the maximum sulfur content of the incoming raw material butane over

140 ppm shall be reported to the DAQ on the monthly basis, the usage of the supplier of the butane has to be discontinued until the compliance can be demonstrated; each case of the exceedance of the maximum annual average sulfur content of the incoming raw material butane over 58 ppm shall be reported to the DAQ on the monthly basis, the usage of the supplier(s) of butane with the highest sulfur content has to be discontinued in such a manner that the compliance can be demonstrated;

2. The amount of butane used from each supplier shall be documented; the monthly butane billing records from each supplier shall be kept on site;

3. The total and average hourly SO_2 emissions for the month resulting from butane shall be calculated based on the monthly sulfur analysis of the incoming raw material butane and on the amount of butane used; calculation of the SO_2 emission rate will assume that all sulfur fed to the reactors is converted to form SO_2;

b. For the fuel and natural gas burned in the thermal oxidizer:

1. The amount of the fuel and natural gas burned in the incinerator monthly shall be documented; the monthly billing records from each fuel and natural gas supplier shall be kept on site;

2. The total and average hourly SO_2 emissions for the month, resulting from burning of fuel and natural gas, shall be calculated separately for the fuel gas and for the natural gas:

(i) For the fuel gas (not a pipe line quality natural gas), SO_2 emissions shall be calculated based on the quarterly sulfur analysis (obtained from the fuel gas supplier, for example from CRLLC refinery); calculation of the SO_2 emission rate will assume that all sulfur fed to the reactors is converted to SO_2;

(ii) for the pipe line quality natural gas (with 2,000 grains /10^6 scf sulfur content), SO_2 emissions shall be calculated based on the AP-42 emission factor of 0.6 lb / 10^6 scf, calculation of the SO_2 emission rate will assume that all sulfur fed to the reactors is converted to SO_2;

c. Total SO_2 emissions:

1. The average hourly, monthly, and twelve-month rolling total emission rate of SO_2 from emission point 11E (resulting from butane, fuel gas and natural gas burning) shall be totaled;

2. The total pounds of emissions (resulting from butane, fuel gas and natural gas burning) shall be recorded on a monthly basis.

[45CSR14, R14-0008, A.19]

4.2.3. The permittee shall maintain in proper operation and calibration continuous emission monitoring (CEM) systems for carbon monoxide (CO). The CEM equipment shall comply with Performance Specifications 4 set forth in Appendix B of 40 CFR 60. Calibration checks on the CEM equipment shall be conducted on a frequency of at least once every 24 hours when the thermal oxidizer is being operated. This calibration must automatically check the zero and the span calibration drifts at least once daily in accordance with a written procedure. The permittee shall have an alternative monitoring and compliance plan for the thermal oxidizer. A copy of this alternative monitoring and compliance plan has been provided to the Region III Office of the USEPA. The alternative monitoring and compliance plan addresses situations where calibration checks determine that the CEM equipment is underestimating CO emissions and CEM performance cannot, within 48 hours of discovery of underestimation of CO emissions, be restored to the appropriate specifications (4 for CO) as set forth in Appendix B of 40 CFR

60. This proposed monitoring and compliance plan shall be subject to approval by the DAQ with implementation by the permittee no later than 30 days following approval notification by the DAQ. The approved alternative monitoring and compliance plan shall be used only if the failure of the CEM equipment is such that it cannot be remedied by recalibration of the CEM unit.
[45CSR14, R14-0008, B.4]

4.2.4. Visual emission checks of each emission point specified (11E) shall be conducted monthly. These checks shall be conducted during periods of facility operation for a sufficient time interval, but not less than 1 minute, to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in Method 9 within three (3) days unless the permittee can demonstrate a valid reason that the time frame should be extended. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained stating the date and time of each emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c]

4.3. Testing Requirements

4.3.1. None.

4.4. Recordkeeping Requirements

4.4.1. The following information shall be recorded and maintained on-site by the permittee for a period of at least five (5) years and such records shall be made available to the Director or his duly authorized representative upon request:

a. the specific date, time and duration of each occurrence when the vent stream is routed to the plant abatement scrubber and there is no flow rate going to the thermal oxidizer.
[45CSR14, R14-0008, B.1.b]

b. carbon monoxide (CO) emission quantities as measured at least every 15 minutes and averaged on a calendar daily basis using the continuous emission monitoring (CEM) data.
[45CSR14, R14-0008, B.1.c]

c. thermal oxidizer firebox temperature measured at least every 15 minutes and averaged on an hourly basis.
[45CSR14, R14-0008, B.1.d]

d. the number of restarts attempted following each outage, ID and hours of operation (start/end) of MAN process reactors during the outage;
[45CSR§30-5.1.c]

e. billing records from the raw material butane, fuel gas and natural gas suppliers as described in the section 4.2.2.a.2 and 4.2.2.b.1of this Permit;
[45CSR14, R14-0008, B.1.g]

f. the average hourly (as calculated on a per month basis), monthly, and twelve-month rolling total emission rate of SO_2 from emission point 11E (as described in Section 4.2.2.c.1of this Permit).
[45CSR14, R14-0008, B.1.f]

g. monthly sulfur analysis obtained from the butane suppliers (as described in Section 4.2.2.a.1 of this Permit).
[45CSR14, R14-0008, B.1.h]

h. maximum annual average sulfur content of the butane calculated monthly based on the sulfur analysis (as described in Section 4.2.2.a.1 of this Permit).
[45CSR§30-5.1.c]

i. quarterly sulfur analysis of the supplied fuel gas (as described in Section 4.2.2.b.2.i of this Permit).
[45CSR14 R14-0008, B.1.i]

j. to demonstrate compliance with the emission limits in Section 4.1.1. of this permit, the permittee shall keep records of annual emissions based on the previous calendar year. These records shall cover the period commencing on the first day of January and extending until December 31 of that same year. Successive years shall have the same recordkeeping period.
[45CSR14, R14-0008, B.1.j]

A "Certification of Data Accuracy Form" must be completed and accompany the records (described in 4.4.1.a through 4.4.1.c, 4.4.1.e through 4.4.1.g, 4.4.1.i and 4.4.1.j above) requested by the Director or his duly authorized representative, and all periodic reports that are required to be submitted to the Division of Air Quality.
[45CSR14, R14-0008, B.1]

4.4.2. For the purpose of monitoring compliance, the permittee shall record, on a monthly basis, all plant thermal oxidizer outage time periods. On a monthly basis, the permittee shall record exceedances of thermal oxidizer temperature and periods when the flow is diverted from the thermal oxidizer. For each occurrence, an explanation of the outage and a description of corrective action taken shall be included in the report.
[45CSR14, R14-0008, B.2]

a. For purposes of monitoring compliance with the provisions of 4.1.1 of this permit for carbon monoxide, the permittee shall provide a written report of those instances where the monitored emission rate of carbon monoxide exceeds the hourly emission limit from the thermal oxidizer stack within 30 calendar days of any exceedance. For each reported exceedance, an explanation for the exceedance and a description of the corrective action taken shall be reported to the Director of the Division of Air Quality. For the purposes of this reporting requirement, an exceedance does not include those thermal oxidizer bypass events allowable per Section 4.1.3.
[45CSR14, R14-0008, B.7]

4.4.3. The permittee shall develop and implement a Quality Assurance and Quality Control (QA/QC) program. The QA/QC program shall comply with requirements set forth in Appendix F of 40 CFR 60, Procedure 1. Requirements include but are not limited to the following:

a. Each source owner or operator must develop and implement a QC program. As a minimum, each QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. Calibration of CEMS.
ii. Calibration Drift (CD) determination and adjustment of CEMS.
iii. Preventative maintenance of CEMS (including spare parts inventory).

iv. Data recording, calculations, and reporting.
v. Accuracy audit procedures including sampling and analysis methods.
vi. Program of corrective action for malfunctioning CEMS.

b. The Relative Accuracy Test Audit (RATA) must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the Performance Specification 4 in Appendix B of 40 CFR 60.

c. Cylinder Gas Audit (CGA) may be conducted in three of four calendar quarters, but in no more than three quarters in succession.
[45CSR14 R14-0008, B.5]

d. The permittee will keep all records associated with the CO CEMS QA/QC program on-site for 5 years. Such records will be made available to the Director or his or her duly authorized representative upon request.
[45CSR14, R14-0008, B.6]

4.5. Reporting Requirements

4.5.1. For purposes of monitoring compliance with provisions of section 4.1.1 of this permit for volatile organic compounds (VOC), the permittee shall provide a written report of those instances where the thermal oxidizer hourly average combustion temperature drops more than 50°F below the average point established during the most recent thermal oxidizer test for any three (3) consecutive one-hour periods starting on the hour during operation of the thermal oxidizer. Such report shall be submitted within 30 calendar days of any such exceedance. For each reported exceedance, an explanation for the exceedance, the calculated hourly emission rate of VOC from the thermal oxidizer stack, and a description of the corrective action taken shall be reported to the Director of the Division of Air Quality. For the purposes of this reporting requirement, an exceedance does not include those thermal oxidizer bypass events allowable per Section 4.1.3.
[45CSR§30-12.7]

5.0. Storage Tanks Requirements (Emission Points 1E, 2E, 3E, 5E, 6E, 7E, 10E, 15E)

5.1. Limitations and Standards

5.1.1. Emissions to the atmosphere from Emission Point 1E (the stack exhausting the scrubber D-400, which controls emissions from the crude maleic anhydride tank F-330 and the forecut storage tank F-400) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates
	Tons per Year
Maleic Anhydride	0.11
Xylene	0.09
Total VOCs [1]	0.2

[1] Total VOC emissions equal sum of xylene and maleic anhydride emissions.

[45CSR14, R14-0008, A.4]

5.1.2. Emissions to the atmosphere from Emission Point 2E (the tank vent for the xylene cut tank F-413) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates	
	Pounds per Hour	Tons per Year
Xylene	15.2	1.48
Total VOCs [1]	15.2	1.48

[1] Total VOC emissions equal xylene emissions.

[45CSR14, R14-0008, A.5]

5.1.3. Emissions to the atmosphere from Emission Point 3E (the stack exhausting the scrubber D-412 which controls emissions from the maleic anhydride product tank F-412) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates
	Tons per Year
Maleic Anhydride	0.05
Total VOCs [1]	0.05

[1] Total VOC emissions equal maleic anhydride emissions.

[45CSR14, R14-0008, A.6]

5.1.4. VOC emissions to the atmosphere from Emission Point 5E (the tank vent for the first waste maleic acid tank - M-1410A) shall not exceed 1.0 tons per year.
[45CSR14, R14-0008, A.7]

5.1.5. VOC emissions to the atmosphere from Emission Point 6E (the tank vent for the second waste maleic acid tank - M-1410B) shall not exceed 1.0 tons per year.
[45CSR14, R14-0008, A.8]

5.1.6. Emissions to the atmosphere from Emission Point 7E (the vent for the refrigerated condenser RFG-414 that controls emissions from the process water tank F-414) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates
	Tons per Year
Xylene	0.2
Total VOCs [1]	0.2

[1]Total VOC emissions equal xylene emissions.

[45CSR14, R14-0008, A.9]

5.1.7. Emissions to the atmosphere from Emission Point 10E (the stack for the scrubber D-600 which controls emissions during product loading) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates
	Tons per Year
Maleic Anhydride	0.21
Total VOCs [1]	0.21

[1] Total VOC emissions equal maleic anhydride emissions.

[45CSR14, R14-0008, A.10]

5.1.8. Emissions to the atmosphere from Emission Point 15E (the exhaust stack from the scrubber D-601 which controls emissions from storage tanks F-601 and F-602) shall not exceed the following quantities:

Name of Pollutant	Maximum Allowable Emission Rates	
	Pounds per Hour	Tons per Year[2]
Maleic Anhydride	11.8	0.94
Total VOCs [1]	11.8	0.94

[1] Total VOC emissions equal maleic anhydride emissions.
[2] Compliance with the streamlined annual emission limits assures compliance with the annual emission limits established in R14-0008, A.11.

[45CSR14, R14-0008, A.11 for maximum hourly emission limit; 45CSR§30-12.7 for maximum annual emission limits]

5.1.9. The permittee shall not exceed the following annual tank and loading throughput:

Emission Point ID	Tank or Loading Description	Tank ID	Pollutant(s)	Maximum Annual Throughput (Gallons)
1E / 001	Forecut Tank	F-400	MAN & Xylene	2,500,000
	Crude MAN Tank	F-330	MAN	9,000,000
2E / 002	Xylene Cut Tank	F-413	Xylene	4,400,000
3E / 003	MAN Product Tank	F-412	MAN	28,500,000
7E / 007	Process Water Tank	F-414	Xylene/Water	14,000,000
15E / 015	MAN Storage Tank	F-601	MAN	11,000,000
	MAN Storage Tank	F-602	MAN	11,000,000
10E / 010	Product Loading (Includes Tank Truck & Rail Car Loading)	N/A	MAN	17,750,000

[45CSR14, R14-0008, A.13]

5.1.10. Emissions from tank truck and rail car loading (emission point 10E) operations shall be controlled by a scrubber (D-600) having a minimum design control efficiency for maleic anhydride of 90%.
[45CSR14, R14-0008, A.14]

5.1.11. Emissions from the forecut storage tank F-400 and the crude maleic anhydride tank F-330 (emission point 1E) shall be controlled by a scrubber (D-400) having a minimum design control efficiency for maleic anhydride of 90%.
[45CSR14, R14-0008, A.15]

5.1.12. Emissions from the maleic anhydride product tank F-412 (emission point 3E) shall be controlled by a scrubber (D-412) having a minimum design control efficiency for maleic anhydride of 90%.
[45CSR14, R14-0008, A.16]

5.1.13. Emissions from the maleic anhydride product tanks F601/F-602 (emission point 15E) shall be controlled by a scrubber (D-601) having a minimum design control efficiency for maleic anhydride of 90%.
[45CSR14, R14-0008, A.16]

5.1.14. Emissions from the process water tank F-414 (emission point 7E) shall be controlled by a refrigerated vent condenser (RFG-414) having a minimum design control efficiency for xylene of 96%.
[45CSR14, R14-0008, A.17]

5.1.15. Control Devices D-400, D-412, D-600, D-601, and RFG-414 may be bypassed to perform maintenance/repair activities up to 72 hours per control device per calendar year, with hours counted only when the emission source tanks are being filled. Any such events shall be recorded monthly, including the date and duration of the bypass, the nature of the maintenance or repair conducted, and the quantity of regulated air pollutants emitted during the bypass time period.
[45CSR14, R14-0008, A.20]

5.2. Monitoring Requirements

None

5.3. Testing Requirements

None

5.4. Recordkeeping Requirements

5.4.1. The following information shall be recorded and maintained on-site by the permittee for a period of at least five (5) years and such records shall be made available to the Director or his duly authorized representative upon request:

a. The permittee shall comply with the following approved monitoring plan and keep monitoring reports on site for 5 years for the forecut storage tank scrubber D-400 (Emission Point 1E), the MAN product tank scrubber D-412 (Emission Point 3E), the scrubber D-600 on vents from tank truck and tank car loading operations (Emission Point 10E), and the scrubber D-601 on the vents from the MAN product storage tanks (Emission Point 15E):

1. Operate the monitoring system (flow monitors on the makeup water to the four referenced scrubbers with the signals routed to the Distributed Control System (DCS) located in the control room) when the scrubbers are operating. Signals from these flow monitors are received and archived by the DCS and a weekly flow monitoring report is generated for the four scrubbers.

2. For scrubbers D-400, D-412, and D-601, a low DCS flow alarm will be activated in the event the makeup flow drops below one gallon per minute. When the alarm is activated, an operator will investigate the cause of the low flow alarm and troubleshoot the problem.

3. For scrubber D-600 the permittee shall follow a standard operating procedure requiring the operator to ensure the scrubber makeup water is flowing and the fan is running prior to commencing product loading operations.

[45CSR14, R14-0008, B.1.c]

b. to demonstrate compliance with the emission limits in Specific Requirements 5.1.1 through 5.1.8 of this permit, the permittee shall keep records of annual emissions based on the previous calendar year. These records shall cover the period commencing on the first day of January and extending until December 31 of that same year. Successive years shall have the same recordkeeping period.
[45CSR14, R14-0008, B.1.j]

c. the monthly throughput rates (gallons per month) for the operations that are described in Section 5.1.9 of this permit, and twelve-month rolling annual throughput rate for each operation.
[45CSR§30-5.1.c]

The "Certification of Data Accuracy Form" must be completed and accompany the records (described in 5.4.1.a through 5.4.1.b) requested by the Director or his duly authorized representative, and all periodic reports that are required to be submitted to the Division of Air Quality.
[45CSR14, R14-0008, B.1]

5.5. Reporting Requirements

None

6.0. Portable Diesel Compressors Requirements (Emission Points 17E through 56E)

6.1. Limitations and Standards

6.1.1. In accordance with the information filed in Permit Application R13-3297T, the Portable Diesel Compressors (Emission Points 17E through 56E) identified under Table 1.1 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and shall not exceed the emission limits given in the following table for all of the portable air compressors combined:

Regulated Pollutant	Maximum Emissions	
	lb/hr	tpy
PM/ PM_{10}/ $PM_{2.5}$	1.00	1.14
SO_X	6.24	7.00
NO_X	32.28	36.30
VOC	7.68	8.60
CO	17.48	19.70
Total HAPs	1.38	1.55

[45CSR13, R13-3297T, 4.1.1 and 45CSR§13-5.11]

6.1.2. The permittee is limited to operating each portable air compressor a maximum of 2,250 operating hours or a total maximum of 90,000 operating hours for a maximum of 40 portable air compressors.
[45CSR13, R13-3297T, 4.1.2]

6.1.3. Each portable air compressor must meet the definition of a *nonroad engine* at all times and no portable air compressor shall remain at the facility for more than 12 consecutive months.
[45CSR13, R13-3297T, 4.1.3 and §40.1068.30 (2)(iii)]

6.1.4. Diesel engines that do not meet the definition of a *nonroad engine* per §40.1068.30 shall be subject to the applicable requirements of 40 C.F.R. 60, Subpart IIII and/or 40 C.F.R. 63, Subpart ZZZZ if they meet the applicability requirements of § 60.4200 and/or §63.6585.
[45CSR13, R13-3297T, 4.1.4]

6.1.5. This temporary permit (conditions 6.1.1 through 6.1.4, 6.2.1, 6.4.1, 6.4.2, 6.5.1 and 6.5.2) shall expire six (6) months from the effective date of the R13-3297T (March 10, 2016), unless the permittee requests an extension in writing in accordance with 45CSR13§11.2 and §11.3. (An extension was requested on August 31, 2016. Extended expiration date: September 12, 2017).
[45CSR13, R13-3297T, 4.1.5]

6.2. Monitoring Requirements

6.2.1. For the purpose of determining compliance with the emission limits of section 6.1.1 and the portable engine requirements defined in 6.1.2 and 6.1.3 of this permit, the permittee shall monitor the hours of operation of the portable air compressors and the number of portable air compressors in operation.
[45CSR13, R13-3297T, 4.2.1]

6.3. Testing Requirements

6.3.1. Reserved.

6.4. Recordkeeping Requirements

6.4.1. To demonstrate compliance with the emission limits required by section 6.1.1 of this permit and the operating restrictions required by section 6.1.2 of this permit, the permittee shall maintain records of the total hours of operation for all portable air compressors and the record shall include the number of portable air compressors in operation.
[45CSR13, R13-3297T, 4.4.4]

6.4.2. To demonstrate compliance with the operating restriction required by 6.1.3 of this permit, for each temporary portable air compressor the permittee shall maintain records of the date that each portable air compressor was initially received at the facility and the date that it was removed from the facility.
[45CSR13, R13-3297T, 4.4.5]

6.5. Reporting Requirements

6.5.1. The permittee shall notify the Director within 48 hours of discovery in the event that the NO_X emission limit established in 6.1.1 is exceeded. A written notification shall be submitted within 5 days of any such discovery.
[45CSR13, R13-3297T, 4.5.1]

6.5.2 The permittee shall notify the Director within 5 days of discovery in the event that any portable air compressor has remained on site at the facility for more than 12 consecutive months.
[45CSR13, R13-3297T, 4.5.2]

APPENDIX A

Equivalency Determination Request Approval,

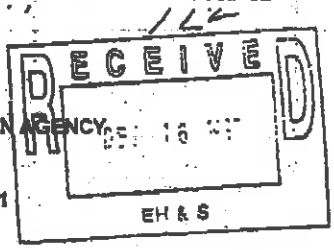
40 CFR 60, Subpart IIII

JAN 08 2007 14:25 FR MARATHON DOMESTIC LLC 3045282648 TO 913049260479 P.01/02

TO: [illegible]

FROM: JEFF MCCLUNG

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431



In Reply Refer To: 3AT13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DEC 05 1997

Ms. Tara L. Lanier
Environmental Engineer
Ashland Chemical Company
P.O. Box 2219
Columbus, Ohio 43216

Re: Equivalency Determination Request Approval

Dear Ms. Lanier:

The Philadelphia Regional Office of the Environmental Protection Agency (EPA-Region III) has received and reviewed your request, dated October 2, 1997, for an equivalency determination in regard to your current method for indicating exhaust gas flow to your incinerator control device as compared with the monitoring method required under NSPS Subpart III, Standards of Performance for Volatile Organic Compound Emissions from the Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes, as codified at 40 C.F.R. Part 60, Sections 60.610 et seq. Region III has studied your submitted documents, has consulted with EPA Headquarters personnel for coordination putposes and has decided to approve your current flow indicating method as specified in your written submission to EPA, dated October 2, 1997 with attachment including the subsequent submissions. According to your information, Ashland does not currently have a flow indicating device in the location specified under Section 60.613 (a)(2) which states, "The flow indicator shall be installed in the vent stream from each affected facility at a point closest to the inlet of each incinerator and before being joined with any other vent stream". Ashland does have a Distributive Control System (DCS) which directs the reactor off-gas flow in the required direction to the appropriate control device, either the incinerator or the wet scrubber, based on such things as control equipment malfunction and necessary maintenance. The DCS notes the bypass valve's position, which indicates whether any gas flow is going to the wet scrubber system, at all times and the normal operation is for this valve to be in the closed position forcing the vent gas stream from the reactors through the incinerator system as opposed to the scrubber system. There is no actual flow indicating device in the vent stream, itself, at the outlet of each reactor as this gas stream is extremely corrosive in nature, at an elevated temperature, and would cause continuous mechanical problems at the indicator. Ashland does know the gas flow rate from the reactors by the amount of inlet flows to each reactor as this is a critical process parameter for proper reactor operation.

According to the process flow diagram received from Ashland on October 28, 1997, the Neal, West Virginia facility produces maleic anhydride through the use of four (4) reactors, a gas

Customer Service Hotline: 1-800-438-2474

JAN 09 2007 14:26 FR MARATHON DOMESTIC LLC 3045282648 TO 913049250479 P.02/02

cooling system, various separators, a maleic acid scrubber system, a batch refining system, and assorted tanks and piping etc. The emissions from the reactor systems eventually can go to either a standby emission abatement scrubber system or to an incinerator system which is the normal route during routine operations. The Company reports the usage of the abatement scrubber, for any reason, to the State of West Virginia. The electronic valves leading to the abatement scrubber and the incinerator system communicate with each other when one has to open and the other has to close off. The Company knows the positions of these valves at all times from the process operation control room and, therefore, where the reactor off gas flow is going. The performance of the abatement scrubber and incinerator systems also allows the Company to know that a gas flow exists and where it is going as well.

The requirement for a flow indicating device is not new to the NSPS regulations as similar conditions exist in the other SOCMI NSPS Rules, namely, Subparts RRR and NNN where the flow indicator required locations are different between the two Rules. EPA has approved the usage of the flow indicator location stipulated in Subpart RRR as suitable for complying with Subpart NNN requirements under certain conditions and EPA also approved the usage of electronic valve position indicators as suitable for the flow indicator requirement under the Hazardous Organic NESHAP (HON) regulations. Therefore, Region III believes that the proposed equivalent monitoring method in use at Ashland Chemical sufficiently satisfies the intent of the flow indicator requirement under Subpart III and is, hereby, approved. This approval is granted under the provisions of Subpart A, Section 60.13(i)(4), because Ashland indicates that it can and has demonstrated that the operation of the electronic valves enables the Company to accurately determine the presence of exhaust gas flow to either the primary control device or the bypass line on a continuing basis under the representative range of process operations. Ashland shall comply with all other Subpart III requirements as written as well as maintain up-to-date, readily accessible records of all periods and the duration when the vent stream is diverted from the primary control device. This alternative monitoring system determination is specific to the reactor system at your Neal, West Virginia maleic anhydride facility currently regulated by NSPS Subpart III. Alternative monitoring system determinations for any other process units subject to NSPS are to be addressed on a request-by-request basis.

If you should have any comments or questions in regard to this matter, do not hesitate to contact David B. McGuigan, of my staff, at (215) 566-2158 or James W. Hegedorn, of his staff, at (215) 566-2161.

Sincerely,

Judith M. Katz, Acting-Director
Air Protection Division

cc: Leonard Wombles, WVDEP-Office of Air Quality
Marcia Mia, OECA

** TOTAL PAGE.02 **