

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Braskem America, Inc.
Neal Plant / Kenova
R30-09900010-2012

John A. Benedict
Director

Issued: April 24, 2012 • Effective: May 8, 2012
Expiration: April 24, 2017 • Renewal Application Due: October 24, 2016

Permit Number: **R30-09900010-2012**
Permittee: **Braskem America, Inc.**
Facility Name: **Neal Plant**
Mailing Address: **200 Big Sandy 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: Kenova, Wayne County, West Virginia
Mailing Address: 200 Big Sandy Road, Kenova, WV 25530
Telephone Number: (304) 453-1371
Type of Business Entity: Corporation
Facility Description: Polypropylene Polymers
SIC Codes: 2821
UTM Coordinates: 360.6 km Easting • 4,246.1 km Northing • Zone 17

Permit Writer: Jesse Hanshaw, P.E.

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

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

Table of Contents

1.0. Emission Units and Active R13, R14, and R19 Permits	3
2.0. General Conditions	9
3.0. Facility-Wide Requirements	17

Source-Specific Requirements

4.0. Source-Specific Requirements for Boiler #1, #3, #4, H-081, and H-082 pertaining to Emission Points 01E, 73E, 75E, and 70E.	23
5.0. Source-Specific Requirements for Particulate Matter Sources	28
6.0. Source-Specific 45CSR21 and 40CFR60 Requirements for Volatile Organic Compound (VOC) Sources corresponding to the Manufacturing of Polypropylene .	32
7.0. Source-Specific Compliance Assurance Monitoring for (ISBL) Flare Control	39
8.0. Source-Specific Emergency Generator Requirements (EG-1, EG-2, EG-3)	43

Appendix A - Monthly Opacity Record - Certification of Data Accuracy

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
001		Boilers			
001-02 B600	01E	Boiler #1 -Natural Gas Steam Boiler: Model# 1VP-10B, Serial# 6380	1961	77 MM Btu/hr	Low NOx Burners Installed in 1995
B603	73E	Boiler #3 - Natural Gas Fired Steam Boiler: Tampella Power Corp., Model No.:Keeler MPO-21 O-Type	2010	96.72 MMBtu/hr	Flue-Gas Recirculation
B604	75E	Boiler #4 - Natural Gas Steam Boiler: Babcock & Wilcox Model # FM 103-79	2011	99.66 MMBtu/hr	Inherent Flue Gas Recirculation
001-03 H-081	70E	H-081- Natural Gas Steam Boiler Nebraska Boiler, Model# NS-A-20, Serial# D-3226	1993	6.3 MM Btu/hr	NA
001-04 H-082	70E	H-082 -Natural Gas Steam Boiler Nebraska Boiler, Model# NS-A-20, Serial# D-3227	1993	6.3 MM Btu/hr	NA
EG-1	EG-1E	H9202A Emergency Generator	1988	330 hp	NA
EG-2	EG-2E	H9202B Emergency Generator	1988	330 hp	NA
EG-3	EG-3E	H516 Emergency Generator	1998	507 hp	NA
002		MaterialPreparation			
B101	B101E	Nitrogen Heater	1960	300 TPY Propane (1.7 MMBtu/hr)	NA
OSBL Flare	B542E	OSBL Flare; Model # STF-S-18C (Smokeless)	Const. - 10/6/60 Modif. - 5/1/88	40,000 lb/hr	(APCD) Air pollution Control Device
D-1105A	B542E	Propylene Dryer	1995	81,000 lb/hr	OSBL Flare
D-1105B	B542E	Propylene Dryer	1995	81,000 lb/hr	OSBL Flare

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
Material Prep. Analyzer Bld. Speed Loops (EP27 & EP28)	B542E	Analyzer speed loops on old 27E and 28E sources	1988		OSBL Flare
J1401A	B542E	#1 Propylene RR Unloading Station	1985	70,000 lb/hr	OSBL Flare
J1401B	B542E	#2 Propylene RR Unloading Station	1985	70,000 lb/hr	OSBL Flare
J1401C	B542E	#3 Propylene RR Unloading Station	1988	70,000 lb/hr	OSBL Flare
J1401D	B542E	#4 Propylene RR Unloading Station	1995	70,000 lb/hr	OSBL Flare
Unpaved Roads	fugitive	Facility-wide unpaved roads	1960		NA
Paved Roads	fugitive	Facility-wide paved roads	1960		NA
Cooling Tower	fugitive	Facility cooling tower			NA
003		Polymerization			
ISBL Flare	91E	ISBL Flare	1988	366,000 lb/hr	(APCD)
Poly Analyzer (EP29)	B542E	Analyzer Speed Loop on old 29E	1988		Flare
LDAR Components (A-10 and A-11)	Fugitive	Raw Material Prep Fugitive Emissions	1985	NA	NA
LDAR Components (A-91)	Fugitive	Poly Fugitive Emissions	1988	NA	NA
004		Material Recovery			
LDAR Components (A-RR)	Fugitive	Material Recovery Fug. Emissions			NA
005		Product Finishing			

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
G-8812	52E	WPA Feeders, Blender/ Conveyor Bag Filter			APCD
L-8903	52E	L-8903 Feeder #2	1994	75,000 lb/hr	G-8812 Bag Filter
L-8904	52E	L-8904 Feeder #3	1994	75,000 lb/hr	G-8812 Bag Filter
L-8905	52E	L-8905 Feeder #5	1994	75,000 lb/hr	G-8812 Bag Filter
L-8906	52E	L-8906 Feeder #6	1994	75,000 lb/hr	G-8812 Bag Filter
L-8907	52E	L-8907 Feeder #7	1994	75,000 lb/hr	G-8812 Bag Filter
L-8908	52E	L-8908 Feeder #4	1994	75,000 lb/hr	G-8812 Bag Filter
L-8829	74E	L-8829 Blender/Conveyor	1994	75,000 lb/hr	G-8830 Bag Filter
G-8830	74E	L-8829 Blender/ Conveyor Bag Filter	2011	--	APCD
L-8856	56E	WPB Pellet Dryer	1994	75,000 lb/hr	NA
G-738	58E	WPB South Dust Collector			APCD
Matcon-Buls Loading Booth	58E	Matcon-Buls Loading Booth (2 nd Floor)	1988	1500 lb/hr	G-738 Dust Collector
Drum Weigh Station	58E	Drum Weigh Station (3 rd Floor)	1988	1500 lb/hr	G-738 Dust Collector
D-8808	58E	D-8808 Feeder to R1 New Line B Ribbon Blender (3 rd Floor)	1988	1500 lb/hr	G-738 Dust Collector
D-8809	58E	D-8809 Feeder to R1 New Line B Ribbon Blender (3 rd Floor)	1988	1500 lb/hr	G-738 Dust Collector
Matcon-Buls Unloading Booth	58E	Matcon-Buls Unloading Booth (3 rd Floor)	1988	1500 lb/hr	G-738 Dust Collector
Unnamed Cyclone #2.	71E	Portable Blower Unit #2 - Unnamed Cyclone #2			APCD

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
Portable Blower Unit #2	71E	Portable Blower Unit #2	1980	8,000 lb/hr	Unnamed cyclone #2
L-816B	68E	WP2 Extruder	1980	1000 lb/hr	NA
WP2 Pellet Loading Hopper	69E	WP2 Pellet Loading Hopper	1980	1000 lb/hr	NA
006		Product Storage			
G-9001	24E	G-9001 Silos Bag Filter			APCD
D-9003	24E	Pellet Silo	1990	75,000 lb/hr	G-9001 Bag Filter
D-9002	24E	Pellet Silo	1990	75,000 lb/hr	G-9001 Bag Filter
G-9002	26E	G-9002 Silo/Blender Bag Filter			APCD
D-9001	26E	Pellet Silo	1990	75,000 lb/hr	G-9002 Bag Filter
D-9004	26E	Pellet Silo	1990	75,000 lb/hr	G-9002 Bag Filter
G-9003	72E	G-9003 Blenders Bag Filter			APCD
D-9005	72E	Pellet Silos	1994	75,000 lb/hr	G-9003 Baghouse
D-9012	72E	Pellet Silos	1994	75,000 lb/hr	G-9003 Baghouse
G-9004	38E	G-9004 Blenders Bag Filter			APCD
D-9006	38E	Pellet Silo	1994	75,000 lb/hr	G-9004 Bag Filter
D-9011	38E	Pellet Silo	1994	75,000 lb/hr	G-9004 Bag Filter
G-9501	42E	Flotriator Bag Filter			APCD
L-9501	42E	Flotriator	1984	60,000 lb/hr	G-9501 Bag Filter
G-9005	49E	G-9005 Blenders Bag Filter			APCD

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
D-9007	49E	Pellet Silo	1994	75,000 lb/hr	G-9005 Bag Filter
D-9010	49E	Pellet Silo	1994	75,000 lb/hr	G-9005 Bag Filter
G-9006	50E	G-9006 Blenders Bag Filter			APCD
D-9008	50E	Pellet Silo	1994	75,000 lb/hr	G-9006 Bag Filter
D-9009	50E	Pellet Silo	1994	75,000 lb/hr	G-9006 Bag Filter
G-9503	51E	Pelletron Bag Filter			APCD
L-9503	51E	Pelletron	1994	60,000 lb/hr	G-9503 Bag Filter
G-0908	59E	Returned Rail Car Unloading Cyclone Cartridge Filter			APCD
G-0911	59E	Returned Rail Car Unloading Cyclone Bag Filter			G-0908 - Cartridge
G-0904	59E	Returned Rail Car Unloading Cyclone	1980	5,479 lb/hr	G-0911 Bag Filter G-0908 - Cartridge Filter
D-670 (SB-1)	60E	Super Blender	1978	5,479 lb/hr	NA
D-672 (SB-2)	61E	Super Blender	1981	5,479 lb/hr	NA
SB-3	62E	Truck Loading Pellet Silo	1979	33,000 lb/hr	NA

1.2. Active R13, R14, and R19 Permits

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

Permit Number	Date of Issuance
R13-1830J	July 10, 2012
G60-CO19	August 3, 2010

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	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance 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	pph	Pounds per Hour
CO	Carbon Monoxide	ppm	Parts per Million
C.S.R. or CSR	Codes of State Rules	PSD	Prevention of Significant Deterioration
DAQ	Division of Air Quality	psi	Pounds per Square Inch
DEP	Department of Environmental Protection	SIC	Standard Industrial Classification
FOIA	Freedom of Information Act	SIP	State Implementation Plan
HAP	Hazardous Air Pollutant	SO₂	Sulfur Dioxide
HON	Hazardous Organic NESHAP	TAP	Toxic Air Pollutant
HP	Horsepower	TPY	Tons per Year
lbs/hr	Pounds per Hour	TRS	Total Reduced Sulfur
LDAR	Leak Detection and Repair	TSP	Total Suspended Particulate
M	Thousand	USEPA	United States Environmental Protection Agency
MACT	Maximum Achievable Control Technology	UTM	Universal Transverse Mercator
MM	Million	VEE	Visual Emissions Evaluation
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VOC	Volatile Organic Compounds
MMCF/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

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., 45CSR13, R13-1830 condition 3.1.1]
- 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§6-3.2.45CSR13, R13-1830 condition 3.1.2]
- 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 and 45CSR34, 45CSR13, R13-1830 condition 3.1.3]
- 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.
This requirement streamlines compliance with the incinerator requirements pertaining to odors of 45CSR§6-4.6. [45CSR§4-3.1 State-Enforceable only., 45CSR13, R13-1830 condition 3.1.4]
- 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:
- 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.
 - 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.
 - 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. 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. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-1830 condition 4.1.19.]
- 3.1.10. Permanent shutdown. A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5, 45CSR13, R13-1830 condition 3.1.5.]
- 3.1.11. The permittee shall not cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that is required pursuant to condition 3.1.12 to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7, 45CSR13, R13-1830 condition 4.1.16.3.]
- 3.1.12. The permittee shall not cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1, 45CSR13, R13-1830 condition 4.1.16.4.]
- 3.1.13. The permittee shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2, 45CSR13, R13-1830 condition 4.1.16.5.]

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, Permit No. R13-1830, Condition 4.3.5., 4.3.6]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;
 - The analytical techniques or methods used;
 - The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, Permit No. R13-1830, Condition 4.4.1.]

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

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

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

[45CSR§30-4.4. and 5.1.c.3.D.]

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

[45CSR§30-5.1.c.3.E.]

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

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

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

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official

within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

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

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan - Not applicable

3.7. Permit Shield

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

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

- a. A non-applicability determination with respect to 40CFR60 Subpart Dc was made pertaining to Boiler #1, a 77 MM Btu/hr natural gas fired boiler constructed in 1961 before the 1989 applicability date. In 1995, a low NO_x burner was added to Boiler #1; however, the addition is not considered a modification under 40CFR60, Subpart A since it did not result in an increase of air pollutants to which 40CFR60, Subpart Dc applies.

- b. A non-applicability determination with respect to 40CFR60, Subpart Dc was also made for the H-081 and H-082 boilers since their rated capacity is less than the applicability threshold of 10 MM Btu/hr.

4.0. Source-Specific Requirements for Boiler #1-(B600), Boiler #3-(B603), Boiler #4-(B604), H-081-(001-03), and H-082-(001-04) pertaining to Emission Points 01E, 73E, 75E, and 70E.

4.1. Limitations and Standards

4.1.1. The permitted facility shall comply with all applicable requirements of 45CSR2 - “To prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers” provided that compliance is maintained with any more stringent limitation set forth in this permit.

4.1.1.1. The permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1]

4.1.1.2. The visible emissions standards set forth in section 4.1.1.1. shall apply at all times except in periods of start-ups, shutdowns, and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require the permittee to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary. [45CSR§2-9.1]

4.1.1.3. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [45CSR§2-9.2]

[45CSR13, Permit No. R13-1830 condition 4.1.14., 45CSR§2-3.1., Emission Point ID (01E, 73E, 75E, 70E)]

4.1.2. Emissions to the atmosphere from the natural gas fired boilers (Boiler #3, Boilers 001-03 and 001-04, and Boiler #4) shall be limited to the following rates:

Emission Point	Pollutant	Emission Limits	
		pph	tpy
73E Boiler # 3	PM _{2.5}	0.74	2.66
	PM ₁₀	0.74	2.66
	PM	0.74	2.66
	SO ₂	0.06	0.21
	NO _x	9.67	35.00
	CO	19.30	69.83
	VOC	0.53	1.93
70E Boilers H-081 H-082	PM ₁₀	0.09	0.36
	SO ₂	0.01	0.02
	NO _x	1.24	4.68
	CO	1.04	3.94
	VOC	0.14	0.26
75E Boiler #4	PM _{2.5}	0.76	3.32
	PM ₁₀	0.76	3.32
	PM	0.76	3.32
	SO ₂	0.03	0.15
	NO _x	4.98	21.83
	CO	3.99	17.46
	VOC	0.35	1.53

The PM limit established for Boilers #3 and #4 shall streamline and assure compliance with the PM limits defined by 45CSR2, within section 4 for indirect heat exchangers. Additionally, for boilers #3 and #4, the SO₂ limit shall streamline compliance with the SO₂ limit defined for fuel burning units under 45CSR10, Section 3.3.f. [45CSR13, Permit No. R13-1830 condition 4.1.1, 4.1.17, 45CSR§2-4.1, 45CSR10, Emission Point ID (73E, 70E, 75E)]

- 4.1.3. a. Pursuant to 45CSR2, Section 4, the emission of particulate matter into the open air from Boiler #1 shall not exceed 6.93 lb/hr.
[45CSR§2-4.1.b., Emission Point ID (01E)]
- b. Pursuant to 45CSR10, Section 3, the emissions of SO₂ from Boiler #1 shall not exceed 246.4 lb/hr.
[45CSR13, Permit No. R13-1830 condition 4.1.17., 45CSR§10-3.3.f., Emission Point ID (01E)]
- 4.1.4. The permittee shall operate boilers B603 and B604 according to the following procedures:
- 4.1.4.1. Boiler B603 shall be limited to a maximum design heat input of 96.72 MM Btu/hr, shall combust only natural gas and shall not, on a rolling twelve-month basis and in combination with B604, combust natural gas in excess of 700.06 MM scf/yr.
- 4.1.4.2. Boiler B604 shall be limited to a maximum design heat input of 99.66 MM Btu/hr and shall combust only natural gas.
- 4.1.4.3 The permittee shall, at all times B603 or B604 is in operation, utilize flue gas recirculation. A flue gas recirculation rate shall be utilized that is consistent with good engineering practices, manufacturer's recommendations, and data developed during any required stack test so as to guarantee the optimum reductions in the formation of NO_x.
- 4.1.4.4 The permittee shall permanently shut down B603 upon completion of the commissioning phase of B604. If boiler B603 has not been replaced by December 31, 2012, the permittee will have 90 days to complete the stack testing of boiler B603 as required by 4.3.1 of this permit.
- 4.1.4.5. The permittee shall meet all applicable requirements as given under 40 CFR 60, Subpart Dc. Due to utilizing natural gas as the fuel source, these requirements are limited to the reporting and recordkeeping provisions of 40 C.F.R. §60.48c(a), (g), and (i).
- 4.1.4.6. The permittee shall meet all applicable requirements as given under 40 CFR 60, Subpart A.
[45CSR16, 45CSR13, Permit No. R13-1830 condition 4.1.8., 40 C.F.R. §§60.48c(a), (g),(i), Equipment ID (B603, B604)]
- 4.1.5. The two boilers, identified as H081 and H082, shall fire only natural gas and shall be operated in such a manner as to not exceed, for each boiler, a steam production capacity of 5,000 pounds per hour or a maximum design heat input of 6.3 MMBtu per hour.
[45CSR13, Permit No. R13-1830 condition 4.1.5., Equipment ID (H-081 and H-082)]
- 4.1.6. The two boilers, identified as H081 and H082, shall, for each boiler, combust no more than 46.8×10^6 ft³ of natural gas per year on a rolling continuous twelve month basis.
[45CSR13, Permit No. R13-1830 condition 4.1.6., Equipment ID (H-081 and H-082)]
- 4.1.7 The permittee shall demonstrate that any future proposed changes to SO₂ emission rates or emission parameters at the facility will not cause or contribute to any violation of the SO₂ NAAQS.
[45CSR13, Permit No. R13-1830 condition 4.1.9.]

4.2. Monitoring Requirements

- 4.2.1. Boiler #1, Boiler #3, and Boiler #4 shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner consistent with 45CSR§2A-7.1.a.1., which is defined as follows: For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown as well as the quantity of fuel consumed on a monthly basis.

For Boiler #3 (B603) and Boiler #4 (B604) compliance with this monitoring and recordkeeping requirement shall streamline and assure compliance with NSPS fuel monitoring requirements of 4.1.4.5 above. **[45CSR§2A-7.1.a.1., 45CSR§2-8.3.c., Equipment ID (B600, B603, B604)]**

4.3 Testing Requirements

- 4.3.1. The permittee shall discontinue use of the rental Boiler #3 no later than December 31, 2012. If however, operation of Boiler #3 continues beyond this date the permittee will have 90 days to complete stack testing as required below.

The permittee shall conduct, or have conducted, a performance test on Boiler #3 (B603) to determine compliance with the emission limits (as defined within 4.1.2) of the pollutants listed below. The permittee shall use the test methods specified in the following table unless granted approval in writing by the Director to use an alternative test method in a protocol submitted pursuant to 3.3.1.c.

Pollutant	Test Method ⁽¹⁾
CO	Method 10
NO _x	Method 7E

(1) All test methods refer to those given under 40 CFR 60, Appendix A

[45CSR§30-12.7, 45CSR13, Permit No. R13-1830 condition 4.3.7, 4.1.8.4, Emission Point ID (73E)]

- 4.3.2. Within six (6) months of startup of B604 and at such times thereafter as may be required by the Secretary, the permittee shall conduct, or have conducted, a performance test on Boiler #4 (B604) to determine compliance with the emission limits (as defined within 4.1.2) of the pollutants listed below. The permittee shall use the test methods specified in the following table unless granted approval in writing by the Director to use an alternative test method in a protocol submitted pursuant to 3.3.1.c.

Pollutant	Test Method ⁽¹⁾
CO	Method 10
NO _x	Method 7E

(1) All test methods refer to those given under 40 CFR 60, Appendix A

[45CSR13, Permit No. R13-1830 condition 4.3.9, Emission Point ID (75E)]

4.4 Recordkeeping Requirements

- 4.4.1. For the purpose of determining compliance with 45CSR§2-8.3.c as well as the limitations of 4.1.4.1 and

4.1.6. the permittee shall keep individual monthly and rolling twelve-month total records of natural gas usage for boilers B600, B603, B604, H081, and H082 and the corresponding operating schedule records. Said records shall be kept on-site for a period of at least five (5) years. Said records shall be certified and made available upon request of the Director or his/her duly authorized representative.

This requirement streamlines compliance with 40 C.F.R 60.48c(g) as it pertains to Boiler #3, B603 and Boiler #4, B604.

[45CSR§2-8.3.c, 45CSR§2A-7.1.a.1, 45CSR§2A-7.1.b, 45CSR13, R13-1830, Condition 4.4.4., 40 C.F.R. §60.48c(g), Equipment ID (H081, H082, B600, B603, B604)]

- 4.4.2. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction (SSM) in the operation of Boiler B604; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
[45CSR13, R13-1830, Condition 4.4.5, 40 C.F.R. §60.7(b), Equipment ID (B604)]

4.5. Reporting Requirements

- 4.5.1. The permittee shall report any malfunction of a fuel burning unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e. emission exceeding the standards defined in 4.1.1., 4.1.2. and 4.1.3. of this permit) 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:
 - a.1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - a.2. Excess opacity does not exceed 40%.
 - b. The permittee shall report any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision 4.5.1.a, by telephone or e-mail by the end of the next business day after becoming aware of such condition. The permittee shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - b.1. A detailed explanation of the factors involved or causes of the malfunction;
 - b.2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - b.3. An estimate of the mass of excess emissions discharged during the malfunction period;
 - b.4. The maximum opacity measured or observed during the malfunction;
 - b.5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - b.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, 45CSR13, R13-1830, condition 4.5.4, Emission Point IDS (01E, 73E, 75E)]**
- 4.5.2. For Boiler 604, the permittee shall submit notification of the date of construction, no later than 30 days after construction is commenced and actual startup, postmarked within 15 days after such date. The notification shall include:
- (a) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - (b) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

[45CSR16, 45CSR13, Permit No. R13-1830 condition 4.5.5., 40 C.F.R. §§60.48c(a)., Equipment ID (B604)]

- 4.5.3. To demonstrate compliance with section 4.1.4.4 of this permit, the permittee shall submit notification of the date Boiler B603 was permanently shutdown. Additionally, any reference to Boiler B603 is no longer applicable upon permanent shutdown of Boiler B603.
[45CSR13, Permit No. R13-1830 condition 4.5.6., Equipment ID (B603)]

5.0. Source-Specific Requirements for Particulate Matter Sources corresponding to Emission PointsID(s): (24E, 26E, 38E, 42E, 49E, 50E, 51E, 52E, 56E, 58E, 59E, 60E, 61E, 62E, 68E, 69E, 71E, 74E, and 72E)]

5.1. Limitations and Standards

- 5.1.1. The permitted facility shall comply with all applicable requirements of 45CSR7 - "To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations," provided that compliance is maintained with any more stringent limitations set forth in this permit.
- 5.1.1.1 No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 45CSR7.
- 5.1.1.2 The provisions of 5.1.1.1 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.

[45CSR13, Permit No. R13-1830, Condition 4.1.16., 45CSR§§7-3.1, and 3.2.]

5.1.2. Maximum allowable hourly and annual emissions from the following emission points shall not exceed the limitations set forth in the table below.

Emission Points	Pollutant	Emission Limits	
		pph	tpy
24E	PM ₁₀	0.02	0.09
26E	PM ₁₀	0.02	0.09
38E	PM ₁₀	0.02	0.09
42E	PM ₁₀	0.02	0.09
49E	PM ₁₀	0.02	0.09
50E	PM ₁₀	0.02	0.09
51E	PM ₁₀	3.14	13.75
52E and 74E	PM ₁₀	0.02	0.09
56E	PM ₁₀	5.00	21.90
58E	PM ₁₀	0.18	0.79
59E	PM ₁₀	0.55	2.40
60E	PM ₁₀	0.55	2.40
61E	PM ₁₀	0.55	2.40
62E	PM ₁₀	2.38	10.42
68E	PM ₁₀	0.12	0.53
69E	PM ₁₀	0.12	0.53
71E	PM ₁₀	0.80	3.50
72E	PM ₁₀	0.02	0.09

Compliance with the PM emission limits established above streamlines compliance with 45CSR§7-4.1.
[45CSR13, Permit No. R13-1830, Condition 4.1.1, 45CSR§7-4.1]

5.2. Monitoring Requirements

5.2.1. *Opacity Monitoring and Visual Emission Check Procedures.* For the purpose of determining compliance with the opacity limits set forth in 5.1.1., the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of 45CSR7A as soon as practicable, but within seventy-two (72) hours of the final visual emission check for the calendar quarter. A 45CSR7A observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

[45CSR13, Permit No. R13-1830, Condition 4.2.1.]

5.3. Testing Requirements

- 5.3.1. Opacity testing. Any test to determine compliance with the visible emission (opacity) limitations set forth in Sections 5.1.1 per the requirements of Section 5.2.1, shall be conducted by personnel appropriately trained for the task. Personnel performing the visual emissions observation shall be trained and familiar with the limitations and restrictions associated with 40CFR Part 60, Appendix A - Method 22. Any person performing an opacity observation for compliance assessment in the event of visible emissions must be a certified visible emission observer in accordance with 45CSR7A - "Compliance Test Procedures for 45CSR7 - To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations" and Method 22 of 40CFR60 Appendix A. Nothing in this section, however, shall preclude any permittee or the Secretary from using opacity data from a properly installed, calibrated, maintained and operated continuous opacity monitor as evidence to demonstrate compliance or a violation of visible emission requirements. If continuous opacity monitoring data results are submitted when determining compliance with visible emission limitations for a period of time during which 45CSR7A or Method 22 data indicates noncompliance, the 45CSR7A or Method 22 data shall be used to determine compliance with the visible emission limitations.
- [45CSR13, Permit No. R13-1830, Condition 4.3.4.]**
- 5.3.2. Any stack serving any process source operation or air pollution control device on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
- [45CSR§7-4.12, 45CSR13, Permit No. R13-1830, Condition 4.3.3]**
- 5.3.3. *Stack Testing.* At such reasonable times as the Secretary may designate, the permittee may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases when the Secretary has reason to believe that an emission limitation is being violated. For cause, the Secretary may request the permittee to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or at such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports.
- [45CSR13, Permit No. R13-1830, Condition 4.3.1.]**
- 5.3.4. *Compliance Testing.* Any such test to determine compliance with particulate matter limitations set forth in Section 5.1.2 shall be conducted in accordance with Method 5 of 40CFR60, Appendix A, Method 201 or 201A of 40CFR51, or other such appropriate method approved by the Director. All such compliance test must consist of not less than three (3) test runs; any test run duration shall not be less than sixty(60) minutes and no less than thirty (30) standard cubic feet of exhaust gas must be sampled during each test run. Such tests shall be conducted under such reasonable operating conditions as the Director may specify. The

Director, or a duly authorized representative may option to witness or conduct such stack tests. Should the Director exercise this option to conduct such test, the registrant shall provide all necessary sampling connections and sampling ports located in a manner as the Director may require, power for test equipment and required safety equipment in place such as scaffolding, railings and ladders in order to comply with generally accepted safety practices.

[45CSR13, Permit No. R13-1830, Condition 4.3.2., 45CSR§7-8.1]

5.4. Recordkeeping Requirements

- 5.4.1. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, Permit No. R13-1830, Condition 4.4.2.]
- 5.4.2. *Record of Malfunctions of Air Pollution Control Equipment.* For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- The equipment involved.
 - Steps taken to minimize emissions during the event.
 - The duration of the event.
 - The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- The cause of the malfunction.
 - Steps taken to correct the malfunction.
 - Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction
- [45CSR13, Permit No. R13-1830, Condition 4.4.3.]**
- 5.4.3. Compliance with the maintenance of air pollution control equipment requirements of Section 3.1.9 coupled with the air pollution control equipment maintenance and malfunction record keeping requirements of 5.4.1 and 5.4.2 shall constitute compliance with the PM₁₀ emission limits established by 5.1.2. of this Title V permit.
[45CSR13, Permit No. R13-1830, Condition 4.1.3.]
- 5.4.4. The permittee shall maintain records of all monitoring data required by Section 5.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the responsible observer, the results of the check, whether the visible emissions are normal for the process, and, if necessary, all corrective actions taken. The permittee shall also record the general weather conditions during the observations. Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (O/S) or equivalent.
[45CSR13, Permit No. R13-1830, Condition 4.4.6.]

5.5. Reporting Requirements

- 5.5.1. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure additional time periods may be granted by the Director provided a corrective program has

been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1.]

- 5.5.2. Any violation(s) of the allowable visible emission requirement for any emission source discovered during testing using 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, Permit No. R13-1830, Condition 4.5.3.]

6.0. Source-Specific 45CSR21 and 40CFR60 Requirements for Volatile Organic Compound (VOC) Sources corresponding to the Manufacturing of Polypropylene: Equipment-Area IDS or Emission Points: (91E, B542E, 68E, WPB Extruder, WPA Extruder, EP27, EP28, EP29, R201, R202, and Fugitive Emission Areas A-RR, A-10, A-11, A-91, and A-8)

6.1. Limitations and Standards

- 6.1.1. The permitted facility shall comply with all applicable requirements of 40 CFR 60 subpart DDD - "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry," provided that compliance is maintained with any more stringent limitations set forth in this permit.
[Compliance with this condition streamlines and assures compliance with 45CSR§§21-37 and -38.]
[45CSR13 Permit No. R13-1830 condition 4.1.11, 4.1.12, 4.1.13, 45CSR§21-37, 45CSR§21-38, 45CSR16, 40CFR60 Subpart DDD, Emission Point ID(s) (91E, B542E)]
- 6.1.2. The permittee's polypropylene production unit shall control all continuous VOC emissions from the affected facility as defined by 40CFR§60.560(a)(1) in accordance with process emission standard 40CFR§60.562-1(a)(1)(i)(C). This standard requires these vent streams be combusted in a flare that meets the conditions specified in 40CFR§60.18. *The opacity requirements within 40CFR§60.18 streamline compliance with the incinerator opacity requirements of 45CSR§6-4.3.*
[45CSR13 Permit No. R13-1830 condition 4.1.15, 4.1.11, 40CFR§60.562-1(a)(1)(i)(C), 45CSR§6-4.3, Emission Unit ID (OSBL Flare), Emission Point ID(s) (B542E)]

- 6.1.3. The permittee's polypropylene production unit shall control all intermittent VOC emissions from the affected facility as defined in 40CFR§60.560(a)(1) by meeting the control requirements specified by 40CFR§60.562-1(a)(2)(i). This section specifies the permittee shall combust the emissions in a flare that is:
- A) Designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours,
 - B) Operated with a flame present at all times, and
 - C) Designed to maintain a stable flame.
- The opacity requirements specified within 6.1.3.A above streamline compliance with the 20% opacity incinerator requirements of 45CSR§6-4.3.*
[45CSR13 Permit No. R13-1830 conditions 4.1.15, 4.1.11 40CFR§60.562-1(a)(2)(i), 45CSR§6-4.3, Emission Unit ID (ISBL Flare), Emission Point ID(s) (91E)]
- 6.1.4. The permittee's Neal Plant being subject to the provisions of 40CFR60 Subpart DDD shall comply with the standards for VOC equipment leaks per 40CFR§60.562-2. This includes, but is not limited to the requirements specified by 40CFR§60.482-1 through §60.482-10 pertaining to 40CFR60 Subpart VV.
[Compliance with this condition streamlines and assures compliance with 45CSR§§21-37]
[45CSR13 Permit No. R13-1830 conditions 4.1.10, 4.1.12, 45CSR§21-37., 45CSR16, 40CFR§60.562-2, Process Areas (A-RR, A-10, A-11, A-91, A-8)]
- 6.1.5. The feed of Volatile Organic Compounds to the OSBL Flare and ISBL Flare shall not exceed 5,000,000 pounds per year combined on a rolling continuous twelve (12) month basis. Compliance with the annual feed rate to the OSBL flare and ISBL Flare shall constitute compliance with the emission limits established within 6.1.8.
[45CSR13, Permit No. R13-1830, Condition 4.1.2., Emission Point ID (B542E, 91E)]
- 6.1.6. The hourly production, as measured at the polymerization loop reactors (R201 and R202), of polypropylene resin shall not exceed 75,000 pounds/hour. The annual production of polypropylene resin shall not exceed 325,000 tons on a rolling continuous twelve (12) month basis.
[45CSR13, Permit No. R13-1830 Condition 4.1.4., Equipment ID(s) (R201, R202)]
- 6.1.7. The speed loops associated with the de minimus (per 45CSR§13-2.6) in-line process stream analyzer units (EP27, EP28, and EP29) shall at all times be vented to the flare header system.
[45CSR13, Permit No. R13-1830 Condition 4.1.18., Equipment ID(s) (EP27, EP28, EP29)]
- 6.1.8. Maximum allowable hourly and annual emissions from the following emission points shall not exceed the limitations set forth in the table below.

Emission Points	Pollutant	Emission Limits	
		pph	tpy
91E	VOC	29.16	7.38
ISBL Flare and B542E	CO	77.06	19.56
OSBL Flare	NOx	14.21	3.82
	PM ₁₀	7.91	2.02

Compliance with the PM portion of this requirement streamlines compliance with 45CSR§6-4.1.

[45CSR13, Permit No. R13-1830, Condition 4.1.1, 4.1.15, 45CSR§6-4.1]

6.2 Monitoring Requirements

- 6.2.1 The permittee shall comply with the Monitoring Requirements of 40CFR§60.563. The sections applicable to the permittee's Neal Plant include the following:
- §60.563(a) Whenever a particular item of monitoring equipment is specified in this section to be installed, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications that item as follows:
- A flame monitoring device, such as a thermocouple, an ultraviolet sensor, an infrared beam sensor, or similar device to indicate and record continuously whether a pilot light flame is present, as specified below.
- §60.563(b)(2) - If a flare is used:
- (i) A flame monitoring device shall be installed to indicate the presence of a flare flame or a flame for each pilot light, if the flare is used to comply with §60.562-1(a)(1), including those flares controlling both continuous and intermittent emissions.
- §60.563(c) - Owners or operators of control devices used to comply with the provisions of this subpart, except §60.562-1(a)(1)(i)(D), shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
[45CSR16, 40CFR§60.563., Emission Point ID(s) (91E, B542E)]
- 6.2.2. The permittee shall monitor the heat content of the OSBL Flare gas using a gas chromatography (GC) analyzer or other approved device and shall calculate, as a three (3) hour rolling average, the net heating value of the gas using the equations and methods established in 40CFR§60.564(a)(3) and 40CFR§60.564(f) to demonstrate compliance with 40CFR§60.18(c)(3)(ii).
[45CSR13, Permit No. R13-1830, Condition 4.2.2, Emission Point ID (B542E)]

6.3 Testing Requirements

- 6.3.1 The permittee shall comply with the Testing Requirements of 40CFR§60.564. The sections applicable to The permittee's Neal Plant include the following:
- §60.564(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures specified in this section, except as provided under §60.8(b).
- §60.564(a)(1) Whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is a replacement, removal, or addition of a control device, each owner or operator shall conduct a performance test according to the procedures in this section as appropriate, in order to determine compliance with §60.562-1.
- §60.564(e) The owner or operator shall determine compliance with the visible emission and flare provisions in §60.562-1 as follows:
- (e)(1)- Method 22 shall be used to determine visible emissions. The observation period for each run shall be 2 hours.
- (e)(2)- The monitoring device of §60.563(b)(2) shall be used to determine whether a flame is present.
- §60.564(f) The owner or operator shall determine compliance with the net heating value

provisions in §60.18 as referenced by §60.562-1(a)(1)(i)(C). The net heating value of the process vent stream being combusted in a flare shall be computed as follows:

$$H_T = K_3 \left(\sum_{j=1}^n C_j H_j \right)$$

Where:

H_T = Vent stream net heating value, MJ/scm (Btu/scf), where the net enthalpy per mole of off gas is based on combustion at 25°C and 760 mm HG (77°F and 30 in. Hg), but the standard temperature for determining the volume corresponding to one mole is 20°C (68°F).

$K_3 = 1.74 \times 10^7$ (1/ppm)(g-mole/scm)(MJ/kcal) (metric units) where standard temperature for (g-mole/scm) is 20°C

$= 4.67 \times 10^6$ (1/ppm)(lb-mole/scf)(Btu/kcal) (English Units) where standard temperature for (lbmol/scf) is 68°F

C_j = Concentration on a wet basis of compound j in ppm.

H_j = Net heat of combustion of compound j, kcal/(g-mol) (kcal/lbmole), based on combustion at 25°C and 760 mm HG (77°F and 30 in. Hg).

- (1) Method 18 shall be used to determine the concentration of each individual organic component (C_j) in the gas stream. Method 1 or 1A, as appropriate, shall be used to determine the sampling site to the inlet of the flare. Using this same sample, ASTM D1946-77 or 90 (Reapproved 1994) (incorporated by reference – see §60.17) shall be used to determine the hydrogen and carbon monoxide content.
- (2) The sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at 15 minute intervals.
- (3) Published or calculated values shall be used for the net heats of combustion of the sample components. If values are not published or cannot be calculated, ASTM D2382-76 or 88 or D4809-95 (incorporated by reference – see §60.17) may be used to determine the net heat of combustion of component “j”.

§60.564(g) The owner or operator shall determine compliance with the exit velocity provisions in § 60.18 as referenced by § 60.562-1(a)(1)(i)(C) as follows:

- (1) If applicable, the net heating value (H_T) of the process vent shall be determined according to the procedures in paragraph (f) of this section to determine the applicable velocity requirements.
- (2) If applicable, the maximum permitted velocity (V_{max}) for steam-assisted and nonassisted flares shall be computed using the following equation:

$$\text{Log}_{10} (V_{max}) = (H_T + K_4)/K_5$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec)

$K_4 = 28.8$ (metric units), 1212 (English units)

$K_5 = 31.7$ (metric units), 850.8 (English units)

H_T = The net heating value as determined in paragraph (f) of this section, MJ/scm (Btu/scf).

- (3) The maximum permitted velocity, V_{max} , for air-assisted flares shall be determined by the following equation:

$$V_{max} = K_6 + K_7 H_T$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec).

$K_6 = 8.706$ m/sec (metric units)
=28.56 ft/sec (English units)

$K_7 = 0.7084$ [(m/sec)/(Btu/scf)] (metric units)
= 0.00245 [(ft/sec)/(Btu/scf)] (English Units)

H_T = The net heating value as determined in paragraph (f) of this section, MJ/scm (Btu/scf).

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip.

[45CSR16, 40CFR§60.564, Emission Point ID(s) (91E, B542E)]

6.4 Recordkeeping and Reporting Requirements

6.4.1. The permittee shall comply with the following sections from 40CFR§60.565(a):

- (a) Each owner or operator subject to the provisions of 40CFR60 Subpart DDD shall keep an up-to-date, readily-accessible record of the following information measured during each performance test, and shall include the following information in the report of the initial performance test in addition to the written results of such performance tests as required under § 60.8.

(3) When a flare is used to demonstrate compliance with § 60.562-1, except § 60.562-1(a)(2):

- (i) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test,
- (ii) Continuous records of the pilot flame heat-sensing monitoring, and
- (iii) Records of all periods of operations during which the pilot flame is absent.

(5) When a flare is used to demonstrate compliance with § 60.562-1(a)(2):

- (i) All visible emission readings made during the performance test,
- (ii) Continuous records of the pilot flame heat-sensing monitoring, and
- (iii) Records of all periods of operation during which the pilot flame is absent.

[45CSR16, 40CFR§60.565(a), Emission Point ID(s) (91E, B542E)]

6.4.2. The permittee shall comply with the following sections from 40CFR§60.565(e):

(e) Where a flare is used to comply with § 60.562-1, except § 60.562-1(a)(1)(i)(D), each owner or operator subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under § 60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame, as appropriate, is absent.

[45CSR16, 40CFR§60.565(e), Emission Point ID(s) (91E, B542E)]

6.4.3. The permittee shall comply with the following sections from 40CFR§60.565(g) and (i):

(g) Each owner or operator of an affected facility subject to the provisions of this subpart and seeking to demonstrate compliance with § 60.560(j) or § 60.562-1 shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specified by § 60.564.

(i) Each owner and operator subject to the provisions of this subpart is exempt from § 60.7(c) of the General Provisions.

[45CSR16, 40CFR§60.565(g) and (i), Emission Point ID(s) (91E, B542E)]

6.4.4. The permittee shall comply with the following sections from 40CFR§60.565(k):

(k) Each owner or operator that seeks to comply with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of §60.560 (d) and (e), the individual stream exemptions of §60.560(g), or the requirements of § 60.562-1 shall submit to the Administrator semiannual reports of the following recorded information, as applicable. The initial report shall be submitted within 6 months after the initial start-up date.

(4) All periods recorded under § 60.565(e) in which the flare or pilot flame was absent.

[45CSR16, 40CFR§60.565(k), Emission Point ID(s) (91E, B542E)]

6.4.5. For the purpose of determining compliance with Section 6.1.5, the permittee shall maintain records of the 12-month rolling total of VOC loading to each flare and shall maintain records of the 12-month rolling total of the combined VOC loading to both flares.

[45CSR13, Permit No. R13-1830, Condition 4.4.7., Emission Point ID(s) (91E, B542E)]

6.4.6. The permit shall keep records of the calculated heat content of the OSBL flare on a 3-hour average basis. At least 90% of the data for each semi-annual period shall be available at all times.

[45CSR13, Permit No. R13-1830, Condition 4.4.8., Emission Point ID(s) (B542E)]

6.5. Reporting Requirements

6.5.1. The permittee shall comply with the following sections from 40CFR§60.565(l) and (m):

(l) Each owner or operator subject to the provisions of this subpart shall notify the Administrator of the

specific provisions of § 60.562, § 60.560(d), or § 60.560(e), as applicable, with which the owner or operator has elected to comply. Notification shall be submitted with the notification of initial startup required by § 60.7(a)(3). If an owner or operator elects at a later date to use an alternative provision of § 60.562 with which he or she will comply or becomes subject to § 60.562 for the first time (i.e., the owner or operator can no longer meet the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision in § 60.560 (d) or (e)), then the owner or operator shall notify the Administrator 90 days before implementing a change and, upon implementing a change, a performance test shall be performed as specified in § 60.564.

- (m) The requirements of this subsection remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves alternative reporting requirements or means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

[45CSR16, 40CFR§60.565(l) and (m), Emission Point ID(s) (91E, B542E)]

- 6.5.2. The permittee shall report any emergency emissions to the ISBL (91E) or the OSBL (B542E) flare systems to the West Virginia Division of Air Quality. The facility must provide the following information in the report: date of the occurrence, amount and type of materials vented to the flare, time that emissions to the flare started, time that emissions to the flare ended, and the reason for emergency emissions to the flare.
[45CSR13, Permit No. R13-1830, Condition 4.5.1., Emission Point ID(s) (91E, B542E)]

- 6.5.3. The permitted facility shall comply with the certification and reporting requirements of Sections 5.1 and 5.2 of 45CSR21. Section 5.2 of this Rule is stated as follows:

Reports of excess emissions. -- Except as provided in section 45CSR§21- 9.3., the owner or operator of any facility containing sources subject to this section 5. shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

- a. The name and location of the facility;
- b. The subject sources that caused the excess emissions;
- c. The time and date of first observation of the excess emissions; and
- d. The cause and expected duration of the excess emissions.
- e. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
- f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

[45CSR13, Permit No. R13-1830, Condition 4.5.2., Emission Point ID(s) (91E, B542E)]

7.0. Source-Specific (ISBL) Flare Compliance Assurance Monitoring (CAM) in accordance with 40 C.F.R 64: (91E)

7.1. Limitations and Standards

- 7.1.1. In order to demonstrate compliance with the VOC limitations defined within permit condition 6.1.8 the ISBL flare shall comply with the CAM requirements defined within this section.
[40 C.F.R. 64]

7.2. Monitoring Requirements

- 7.2.1. The permittee shall implement a CAM program for the ISBL flare based on the following performance indicators:
- a. The flare shall be operated with each of its pilot lights operating at all times when emissions could be routed to the control device. The permittee shall continuously monitor each pilot for the presence of a pilot flame by using a thermocouple or any other equivalent device to detect the presence of a flame. This monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications. Continuous monitoring for CAM shall be considered equivalent to at least one recorded measurement every fifteen (15)-minute period.
 - b. The flare shall be operated with no visible emissions during routine intermittent venting of the production unit and ancillary equipment except as allowed in Condition 7.2.3. No visible emission in this context shall mean, visible emissions for no more than 5 minutes within any consecutive 2 hour period using Method 22.
[40 C.F.R. 64, 45CSR§30-5.1.c]
- 7.2.2. **Proper Maintenance.** The permittee shall maintain monitoring at all times, including maintaining necessary spare parts for routine repairs of the monitoring equipment.

[45CSR§30-5.1.c.; 40 C.F.R. §64.7(b)]

- 7.2.3. **Response to Excursions or Exceedances.** In accordance with the operation of the ISBL Flare an excursion shall be defined as any period in which any of the flare's pilot lights are not detected. Additionally, an excursion shall also be recorded if visible emissions are detected for greater than 5 minutes within any consecutive 2 hour period, that are not related to a documented malfunction, startup, or shutdown condition.
- a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or below the applicable emission limitation or standard, as applicable.
 - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. §64.7(d); 45CSR§30-5.1.c.]

- 7.2.4. **Documentation of Need for Improved Monitoring** - After approval of monitoring under 40 C.F.R. Part 64, If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the result of compliance or performance testing/design evaluation document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 C.F.R. §64.7(e); 45CSR§30-5.1.c.]

7.2.5. **Quality Improvement Plan (QIP)**

- (a) Based on the results of a determination made under permit condition 7.2.3.b, 7.2.5.(b), or 7.2.5.(c) the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, it shall be developed, implemented, and modified as required according to 40 C.F.R. §§64.8(b) through (e). Refer to permit condition 7.5.1(b)(iii) for the reporting required when a QIP is implemented.
- (b) If five (5) percent or greater of the time, is documented with no pilot light available during a calendar quarter, the permittee shall develop and implement a QIP. The Director may waive this QIP requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require flare assessment tests at any time pursuant to ~~40 C.F.R. §60.18~~ [to verify manufacturer's design specifications are being adhered to.](#)
- (c) If during any time period the permittee observes a visible emission (VE) excursion, which shall be defined as, the presence of visible emissions exceeding 5 minutes within any 2 hour time period the permittee shall develop and implement a QIP. Additionally, the observed emissions should not be counted towards the total if related to a pilot light excursion or during a startup, shutdown or malfunction (SSM) event.

In developing a QIP due to visible emission excursions, the source shall identify through process knowledge and flow monitoring data the type and amount of waste gas going to the flare at the time of each VE excursion. The data gathered shall be compared to the design criteria established within ~~40 C.F.R. §60.18~~ [the manufacturer's design specification](#).

[40 C.F.R. §§ 64.8 and 64.7(d); 45CSR§30-5.1.c.]

- 7.2.6. **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 C.F.R. §64.7(c); 45CSR§30-5.1.c.]

7.3. Testing Requirements

- 7.3.1. At anytime opacity is observed from the ISBL flare, the operator(s) shall report the occurrence to the appropriate Environmental Staff as soon as practical. Braskem shall conduct an evaluation of when the excess opacity occurs and during what venting cycle and flare tip staging. During the excess opacity episode(s) the permittee shall be obligated to determine whether or not the control device is in compliance with the opacity limitations defined within 7.2.1.b of this permit.

[40 C.F.R. 64, 45CSR§30-5.1.c.]

- 7.3.2. In order to verify a control efficiency based on pilot light availability and no visible emissions, a design analysis [based on manufacturer's recommendations](#) shall be conducted [to determine the](#) ~~in order to assess compliance with minimum gas heating value and tip velocity requirements specified by 40 C.F.R. §60.18.~~ The design analysis shall take into account each of the intermittent venting scenarios that can reasonably be expected to occur when operating the polypropylene production unit. This design analysis shall be submitted for approval within 150 days of permit issuance.

[40 C.F.R. 64, 45CSR§30-5.1.c.]

7.4. Recordkeeping Requirements

- 7.4.1. As part of the CAM plan the permittee shall keep an up-to-date, readily-accessible record of the following information:
- All visible emission readings; and heat content determinations, flow rate measurements, and exit velocity determinations made during the flare assessment testing or design analysis,

- b. Continuous records of the pilot flame heat-sensing monitoring, and
- c. Records of all periods of operations during which the pilot flame is absent.

[40 C.F.R. §64.9(b), 45CSR§30-5.1.c, Emission Point ID (91E)]

7.4.2. The CAM related design analysis and CAM plan implementation shall be conducted according to the following schedule:

- a. The permittee shall submit a flare design assessment to the Department within 150 days of permit issuance.
- b. The permittee shall complete the CAM design assessment and implement the CAM monitoring within 180 days of the issuance of this permit.

[40 C.F.R. §§ 64.6(d) and 64.7(a), 45CSR§30-5.1.c, Emission Point ID (91E)]

7.4.3. **General Recordkeeping Requirements for 40 C.F.R. Part 64 (CAM)**

The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitoring performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (condition 7.2.5.) and any activities maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[40 C.F.R. §64.9(b); 45CSR§30-5.1.c.]

7.5. **Reporting Requirements**

7.5.1. **General Reporting Requirements for 40 C.F.R. Part 64 (CAM)**

- a. On and after the date specified in 40 C.F.R. §64.7(a) (condition 7.4.2) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.5.6.
- b. A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) provided in accordance with 40 C.F.R. Part 75; and
 - iii. A description of the actions taken to implement QIP during the reporting period as specified in 40

C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.]

8.0. Source-Specific Emergency Generator Requirements (EG-1, EG-2, and EG-3) CI Fire Pumps : Emission Point ID(s) (EG-1E, EG-2E, and EG-3E)

8.1. Limitations and Standards

8.1.1. The permittee is authorized to operate the Emergency Generators, emission units (EG-1, EG-2, and EG-3), within the following emission limits, in accordance with all terms and conditions of the 45CSR13 G60-C Class II General Permit.

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EG-1 Caterpillar 3406B-DIT (H9202A)	Nitrogen Oxides	10.23	2.56
	Carbon Monoxide	2.20	0.55
	Volatile Organic Compounds	0.83	0.21
	Sulfur Dioxide	0.68	0.17
	Particulate Matter-10	0.73	0.18
EG-2 Caterpillar 3406B-DIT (H9202B)	Nitrogen Oxides	10.23	2.56
	Carbon Monoxide	2.20	0.55
	Volatile Organic Compounds	0.83	0.21
	Sulfur Dioxide	0.68	0.17
	Particulate Matter-10	0.73	0.18

EG-3 Caterpillar 3408-DITA (H516)	Nitrogen Oxides	15.72	3.93
	Carbon Monoxide		0.85
	Volatile Organic Compounds	3.39	
	Sulfur Dioxide	1.27	0.32
	Particulate Matter-10	1.04	0.26
		1.12	0.28

[45CSR13, G60-C019 - Specific Requirement]

- 8.1.2. As stated in 40 C.F.R. §63.6603, the permittee must comply with the following requirements from Table 2d for existing stationary RICE located at area sources of HAP emissions:

For each . . .	The permittee must meet the following requirements, except during periods of startup . . .
Emergency Stationary CI RICE (EG-1, 2, & 3)	Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹ inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

¹Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[40 C.F.R. §63.6603(a), and Table 2d]

- 8.1.3. The permittee must comply with the applicable operating limitations in this section no later than May 3, 2013.
[40 C.F.R. § 63.6595(a)]

- 8.1.4. Requirements for emergency stationary RICE. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(f)(1)(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(f)(1)(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(f)(1)(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or

unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

[40 C.F.R. § 63.6640(f)(1)]

- 8.1.5. (a) You must be in compliance with the emission limitations and operating limitations in 40 C.F.R. 63, Subpart ZZZZ that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. § 63.6605]

- 8.1.6. (e) If you own or operate any of the following stationary RICE, 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:

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

[40 C.F.R. § 63.6625(e)]

- 8.1.7. The permittee must comply with the General Provisions of Table 8 except that per §63.6645(a)(5), the following do not apply: §63.7(b) and ©, §63.8(e), (f)(4), and (f)(6), as well as §63.9(b)-(e), (g), and (h).

[40 C.F.R. § 63.6665]

8.2. Monitoring Requirements

- 8.2.1. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

[40 C.F.R. § 63.6625(f)]

- 8.2.2. (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change

the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. § 63.6625(i)]

8.3 Testing Requirements

8.3.1. None

8.4. Recordkeeping Requirements

8.4.1. (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

[40 C.F.R. § 63.6655(e)]

8.4.2. (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[40 C.F.R. § 63.6655(f)]

8.5. Reporting Requirements

8.5.1. You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

[40 C.F.R. § 63.6640(b)]

8.5.2. You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the

APPENDIX A (Monthly Opacity Record)

Date of Observation: _____

Data Entered by: _____

Reviewed by: _____

Date Reviewed: _____

Describe the General Weather Conditions: _____

requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own

or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

[40 C.F.R. § 63.6640(e)]

Stack/Vent ID/ Emission Point ID	Stack/Vent/Emission Point Description	Time of Observation	Visible Emissions? Yes/No	Consecutive Months of Visual Emissions	Comments

¹ This form shall be signed by a “Responsible Official.” “Responsible Official” means one of the following:

- a. ~~For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation~~ or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.