



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### TITLE V/STATE OPERATING PERMIT

Issue Date: March 2, 2021 Effective Date: February 9, 2022
Revision Date: February 9, 2022 Expiration Date: February 28, 2026

Revision Type: Amendment

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

#### TITLE V Permit No: 10-00027

Federal Tax Id - Plant Code: 26-1547648-1

Owner Information

Name: CALUMET KARNS CITY REF LLC

Mailing Address: 138 PETROLIA ST

KARNS CITY, PA 16041-9222

Plant Information

Plant: CALUMET KARNS CITY REF LLC/KARNS CITY

Location: 10 Butler County 10934 Karns City Borough

SIC Code: 2999 Manufacturing - Petroleum And Coal Products, Nec

Responsible Official

Name: WILLIAM CRAMER Title: PLANT MANAGER

Phone: (724) 756 - 0110 Email: bill.cramer@calumetspecialty.com

**Permit Contact Person** 

Name: KEVIN M KLINE

Title: ENVIRONMENTAL SPECIALIST

Phone: (724) 756 - 9426 Email: kevin.kline@calumetspecialty.com

[Signature]

ERIC A. GUSTAFSON, NORTHWEST REGION AIR PROGRAMMANAGER





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# **SECTION A.** Site Inventory List

	ON A. Site Inventory List			
Source	ID Source Name	Capacity	/Throughput	Fuel/Material
031	#1 BOILER, GAS/OIL, 66 MILLION BTU/HR	66.000	MMBTU/HR	
		550.000	Gal/HR	DISTILLATE OIL
		66.000	MCF/HR	Natural Gas
034 HYDROTREATER REFORMER FURNACE		8.100	MMBTU/HR	
		8.100	MCF/HR	Natural Gas
035 HYDROTREATER H1X REACTOR FURI	HYDROTREATER H1X REACTOR FURNACE	9.100	MMBTU/HR	
		9.100	MCF/HR	Natural Gas
036 HYDROTREATER H2 STRIPPER	HYDROTREATER H2 STRIPPER FURNACE	R FURNACE 2.100	MMBTU/HR	
		2.100	MCF/HR	Natural Gas
040	#3 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91	91.000	MMBTU/HR	
	MILLION BTU/HR	91.000	MCF/HR	Natural Gas
041	#2 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91	91.000	MMBTU/HR	
	MILLION BTU/HR	91.000	MCF/HR	Natural Gas
043	EMERGENCY DIESEL GENERATOR ENGINE (764 BHP)	1.000	Gal/HR	Diesel Fuel
043A	EMERGENCY DIESEL FIRE WATER PUMP ENGINE (208 HP)	1.000	Gal/HR	Diesel Fuel
043B	EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP)	1.000	Gal/HR	Diesel Fuel
043C	EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE (38 HP)	1.000	Gal/HR	Diesel Fuel
043F	EMERGENCY DIESEL BACKUP GEN FOR BOILER INSTRUMENTS (66 HP)	1.000	Gal/HR	Diesel Fuel
043G	EMERGENCY NAT GAS GENERATOR FOR HYDROTREATER (67 HP)	1.000	MCF/HR	Natural Gas
043H	EMERGENCY DIESEL BACKUP FOR WW TREATMENT ENGINE (149 HP)	1.000	Gal/HR	Diesel Fuel
	RETORT PROCESS (2 FURNACES)	5.400	MCF/HR	NATURAL GAS
		2.500	Tons/HR	BAUXITE PER RETORT
102 OLEUM PROCESS	OLEUMPROCESS	4,800.000	Gal/HR	WHITE OIL
		440.000	Gal/HR	OLEUM
105	ALCOHOL STORAGE AND HANDLING	600.000	Gal/HR	ALCOHOL
106	PLANT FUGITIVE VOC EMISSIONS	1.000	Each/HR	FLANGES, PUMPS, SEALS
107	WASTEWATER TREATMENT	21,000.000	Gal/HR	WASTEWATER
109	GASOLINE STORAGE	2.000	Gal/HR	GASOLINE
117	NAPHTHA RERUN UNIT FURNACE	2.500	MCF/HR	NATURAL GAS
118	HYDROTREATER FLARE	90.000	MCF/HR	Refinery Gas
119	NAPHTHA UNIT FLARE	2.200	MCF/HR	Refinery Gas
120	FACILITY ROADS	1.000	Miles/HR	TRUCKS DRIVEN
125	LABORATORY BUILDING	1.000	Gal/HR	VOC CONTAINING MATER
130	GEL MIXER FOR HYDROCARBON GELS WITH LOWER FLASH POINT	1.000	Gal/HR	HYDROCARBON GELS
C101	RETORT PROCESS CYCLONE			
C102A	OLEUM PROCESS VENTURI SCRUBBER A			
C102B	OLEUM PROCESS VENTURI SCRUBBER B			
C105	REFRIGERATED CONDENSER			

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DEP PF ID: 257250

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#### **SECTION A. Site Inventory List**

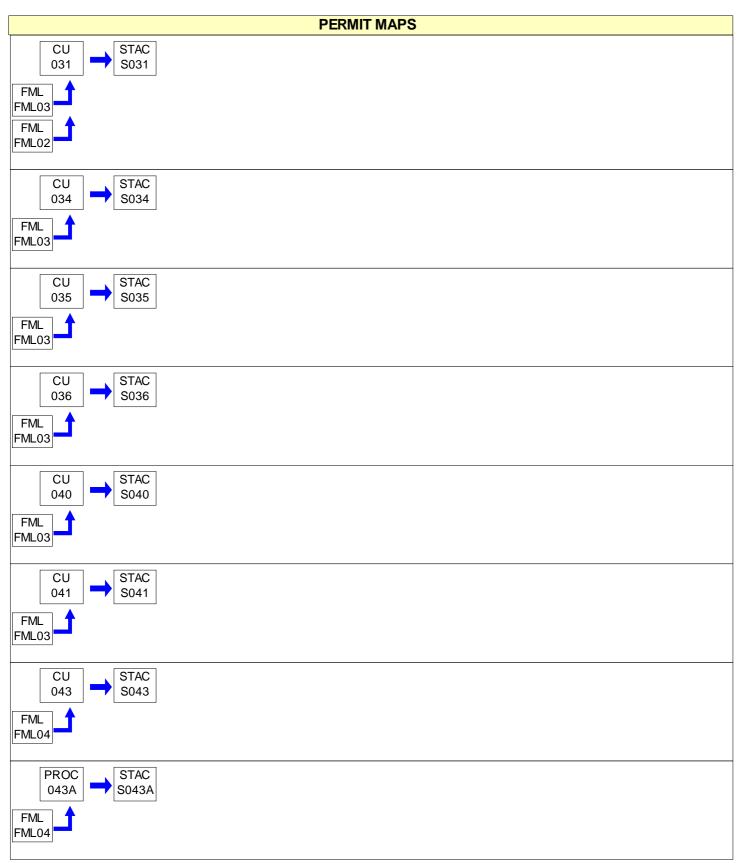
Source I	D Source Name	Capacity/Throughput	Fuel/Material
C118	HYDROTREATER FLARE		
C119	NAPHTHA FLARE		
FML02	FUEL OIL		
FML03	NATURAL GAS LINE		
FML04	DIESEL		
S031	#1 BOILER STACK		
S034	HYDRO REFORMER FURNACE STACK & RETORT HEATERS STACK		
S035	HYDROTREATER H1X REACTOR FURNACE STACK		
S036	H2 STRIPPER FURNACE STACK		
S040	#3 BOILER STACK		
S041	# 2 BOILER STACK		
S043	DIESEL GENERATOR STACK		
S043A	EMERGENCY DIESEL FIRE WATER PUMP ENGINE STACK (208 HP)		
S043B	EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP) STACK		
S043C	EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE(38 HP) STACK		
S043F	EMERGENCY DIESEL GEN FOR BOILER INSTRUMENTS (66 HP) STACK		
S043G	STACK FOR EMERGENCY GENERATOR NEAR HYDROTREATER		
S043H	STACK FOR WWTP EMERGENCY GENERATOR		
S101	RETORT PROCESS CYCLONE STACK		
S102A	OLEUM SCRUBBER STACK A		
S102B	OLEUM SCRUBBER STACK B		
S105	CONDENSER STACK		
S117	NAPHTHA RERUN FURNACE STACK		
S118	HYDROTREATER FLARE STACK		
S119	NAPTHA FLARE STACK		
S125	LABORATORY BUILDING STACKS (17)		
Z106	FACILITY VOC FUGITIVES		
Z107	FUGITIVES FROM WASTEWATER TREATMENT		
Z109	FUGITIVES FROM GASOLINE STORAGE		
Z120	FUGITIVES FROM PLANT ROADWAYS		
Z130	FUGITIVES FROM PRESSURE VESSEL FOR HYDROCARBON GELS		

# **PERMIT MAPS**

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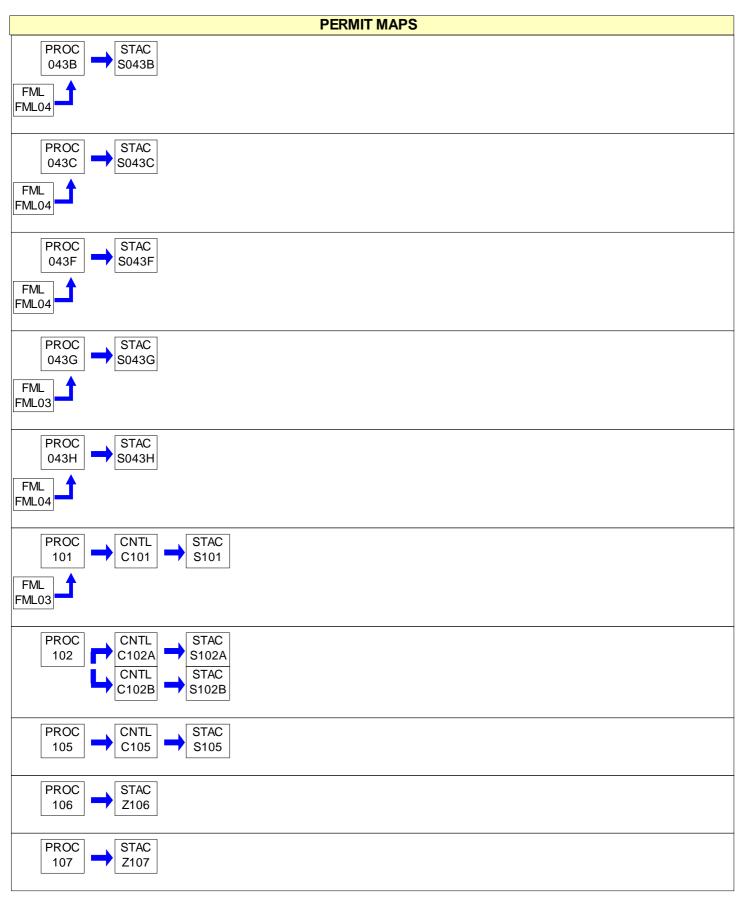






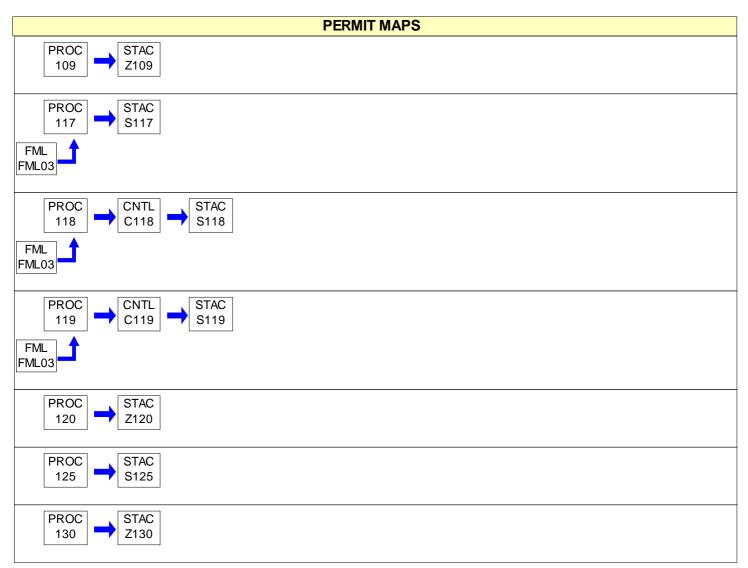
















#001 [25 Pa. Code § 121.1]

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**Definitions** 

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]

**Prohibition of Air Pollution** 

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]

**Property Rights** 

This permit does not convey property rights of any sort, or any exclusive privileges.

#004 [25 Pa. Code § 127.446(a) and (c)]

#### **Permit Expiration**

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]

#### **Permit Renewal**

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

#### **Transfer of Ownership or Operational Control**

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
  - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
  - (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by



the Department.

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(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

## #007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

#### **Inspection and Entry**

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
  - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

# #008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

#### **Compliance Requirements**

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
  - (1) Enforcement action
  - (2) Permit termination, revocation and reissuance or modification
  - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#### #009 [25 Pa. Code § 127.512(c)(2)]

#### Need to Halt or Reduce Activity Not a Defense

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.



#### #010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

#### **Duty to Provide Information**

- (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department 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.
- (b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#### #011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

#### Reopening and Revising the Title V Permit for Cause

- (a) This Title V 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 a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#### #012 [25 Pa. Code § 127.543]

### Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#### #013 [25 Pa. Code § 127.522(a)]

#### Operating Permit Application Review by the EPA

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].





#### #014 [25 Pa. Code § 127.541]

#### **Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#### #015 [25 Pa. Code §§ 121.1 & 127.462]

#### **Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#### #016 [25 Pa. Code § 127.450]

#### **Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#### [25 Pa. Code § 127.512(b)] #017

### **Severability Clause**

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#### #018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

#### **Fee Payment**

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.



- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).
- (e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.
- (1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.
- (2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.
- (3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

#### #019 [25 Pa. Code §§ 127.14(b) & 127.449]

#### **Authorization for De Minimis Emission Increases**

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
  - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
  - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.



- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
  - (4) Space heaters which heat by direct heat transfer.
  - (5) Laboratory equipment used exclusively for chemical or physical analysis.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#### #020 [25 Pa. Code §§ 127.11a & 127.215]

#### **Reactivation of Sources**

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #021 [25 Pa. Code §§ 121.9 & 127.216]

#### Circumvention

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the





phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

### #022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

#### **Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Enforcement & Compliance Assurance Division Air, RCRA and Toxics Branch Air Section 1650 Arch Street, 3ED21 Philadelphia, PA 19103

The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#### #023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

### Sampling, Testing and Monitoring Procedures

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

### #024 [25 Pa. Code §§ 127.511 & Chapter 135]

# **Recordkeeping Requirements**

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
  - (1) The date, place (as defined in the permit) and time of sampling or measurements.
  - (2) The dates the analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.



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- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#### #025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

#### **Reporting Requirements**

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.
- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#### #026 [25 Pa. Code § 127.513]

#### **Compliance Certification**

- (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:
- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.





#### #027 [25 Pa. Code § 127.3]

#### **Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

### #028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

### **Risk Management**

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.







- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
- (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
- (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#### #029 [25 Pa. Code § 127.512(e)]

#### **Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#### #030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

### **Permit Shield**

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
  - (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
  - (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
  - (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#### #031 [25 Pa. Code §135.3]

#### Reporting

- (a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.
- (b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#### #032 [25 Pa. Code §135.4]

#### **Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.







#### I. RESTRICTIONS.

#### **Emission Restriction(s).**

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#### # 001 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
  - (1) Construction or demolition of buildings or structures.
  - (2) Grading, paying and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
  - (4) Clearing of land.
  - (5) Stockpiling of materials.
  - (6) Open burning operations.
  - (7) [Not applicable]
  - (8) [Not applicable]
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.
- (c) [Paragraph (c) of the regulation is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (d) [Paragraph (d) of the regulation is not applicable to this facility.]

#### # 002 [25 Pa. Code §123.2]

#### **Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) [Condition #001 above] if such emissions are visible at the point the emissions pass outside the person's property.

### # 003 [25 Pa. Code §123.31]

#### Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.



#### # 004 [25 Pa. Code §123.41]

#### Limitations

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A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

#### # 005 [25 Pa. Code §123.42]

#### **Exceptions**

The limitations of 25 Pa. Code § 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions). [123.1(a)(1) -- (9) are printed under Emission Restrictions of Condition #001 in this section of permit.]
  - (4) [Not applicable]

#### # 006 [25 Pa. Code §129.14]

#### **Open burning operations**

- (a) Air basins. [Paragraph (a) of the regulation is not applicable to this facility.]
- (b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.
  - (5) The emissions are or may be deleterious to human or animal health.
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
  - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
  - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
  - (4) [Not applicable]
  - (5) [Not applicable]







- (6) A fire set solely for recreational or ceremonial purposes.
- (7) A fire set solely for cooking food.
- (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
  - (1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

- (2) [Not applicable]
- (3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:
- (i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.
- (ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.
- (4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

[This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.]

#### II. TESTING REQUIREMENTS.

#### # 007 [25 Pa. Code §123.43]

#### Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

#### # 008 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes of determining malfunctions or compliance with any applicable requirements.

#### III. MONITORING REQUIREMENTS.

### # 009 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

- (a) The owner or operator shall do the following:
  - (1) Develop and conduct a monitoring program consistent with the provisions of subsection (d).
  - (2) Record leaking components which have a VOC concentration exceeding 2000 ppm for pumps, or 500 ppm for all





other applicable components, when tested in accordance with the provisions of 25 Pa. Code §139.14 (relating to emissions of VOCs and place an identifying tag on each component consistent with the provisions in subsection (d)(3).

- (3) Repair and retest the leaking components as soon as possible. Every reasonable effort shall be made to repair each leak within 15 days unless a unit shutdown is required to make the necessary repair.
  - (4) Identify components which cannot be repaired until the unit is shutdown for turnaround.
- (b) Except for safety pressure relief valves and fittings on all valves 1 inch or smaller, no owner or operator shall install or operate a valve at the end of a pipe or line containing VOCs unless the pipe or line is sealed with a second valve, a blind flange, a plug or a cap. The sealing device may be removed only when a sample is being taken or during maintenance operations.
- (c) Pipeline valves and pressure relief valves in gaseous VOC service shall be marked in some manner that will be readily obvious to both personnel performing monitoring and the Department.
- (d) Monitoring shall be done as follows:
  - (1) The owner or operator shall conduct a monitoring program consistent with the following requirements:
    - (i) Check yearly, by methods referenced in 25 Pa. Code §139.14, pump seals and pipeline valves in liquid service.
- (ii) Check quarterly by methods referenced in 25 Pa. Code §139.14, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.
  - (iii) Check monthly, by visual methods, all pump seals.
- (iv) Check within 24 hours, by methods referenced in 25 Pa. Code §139.14, pump seal from which VOC liquids are observed to be dripping.
- (v) Check, by methods referenced in 25 Pa. Code §139.14, relief valve within 24 hours after it has vented to the atmosphere.
- (vi) Check within 72 hours after repair, by methods referenced in 25 Pa. Code §139.14, component that was found leaking.
- (2) Pressure relief devices which are connected to an operating flare header, vapor recovery devices, inaccessible valves, storage tank valves and valves that are not externally regulated are exempt from the monitoring requirements in paragraph (1).
- (3) The owner or operator, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag, bearing an identification number and the date upon which the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired.
- (e) Record keeping shall comply with the following:
- (1) The owner or operator shall maintain a leaking components monitoring log which shall contain, at a minimum, the following data:
  - (i) The name and process unit where the component is located.
  - (ii) The type of component-- for example, valve, seal.
  - (iii) The tag number of component.
  - (iv) The dates on which the leaking component was discovered and repaired.



- (v) The date and instrument reading of the recheck procedure after a leaking component was repaired.
- (vi) A record of the calibration of the monitoring instrument.
- (vii) Those leaks that cannot be repaired until turnaround.
- (viii) The total number of components checked and the total number of components found leaking.
- (2) Copies of the monitoring log shall be retained by the owner for 5 years after the date on which the record was made or the report was prepared.
- (3) Copies of the monitoring log shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.
- (f) Reporting shall comply with the following:
  - (1) The owner or operator, upon completion of each yearly and quarterly monitoring procedure, shall do the following:
- (i) Submit a report to the Department by the last business day of January, April, July, and October that lists all leaking components that were located during the previous calendar quarter but not repaired within 15 days, all leaking components awaiting unit turnaround, the total number of components inspected and the total number of components found leaking.
- (ii) Submit a signed statement with the report attesting to the fact that, with the exception of those leaking components listed in subparagraph (i), monitoring and repairs were performed as stipulated in the monitoring program.
- (g) The owner or operator may submit an alternative plan for the control of leaks from equipment to the Department. If the Department finds that the alternative plan will achieve an emission reduction which is equivalent to or greater than the reduction which can be achieved under this section and that the alternative plan is as enforceable as this section, then the Department will allow the implementation of this alternative plan.
- (h) The owner or operator may submit to the Department a list of components the inspection of which would involve a significant element of danger. The Department may exempt the components on this list from the requirements of this section if the owner or operator can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated and that these exemptions will not result in a significant reduction in the effectiveness in the control of VOC emissions.

[From plan approval 10-027H, Section C, Condition #003.] [Authority for this condition is also derived from 25 Pa. Code § 129.91 and from the RACT requirements of 25 Pa. Code § 129.99. This condition is included in the SIP.]

#### [25 Pa. Code §127.511]

#### Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall conduct a daily visual monitoring of the facility property, while the plant is in operation, to observe for deviations from 25 Pa. Code §123.1 for fugitive emissions and abnormal visible emissions being emitted into the outdoor atmosphere.
- (b) All visually detected fugitive emissions deviating from 25 Pa. Code §123.1 or abnormal visible emissions shall be reported to the Plant Manager or his designated person.
- (c) If any abnormal visible emissions are observed being emitted from stack S031 and can not be immediately corrected, the opacity of the emissions shall be determined by a 40 CFR 60 Appendix A Method 9 certified visible emissions observer. The observation by the certified visible emissions observer shall begin within 24 hours of the time which the abnormal visible emissions were first observed.
- (d) All Method 9 observation forms completed by the visible emissions observer shall be maintained by the permittee and made available upon request.





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(e) For the purpose of this condition, "abnormal visible emissions" are defined as changes from the normal range in physical characteristics of the plume including but not limited to: changes in plume color and apparent increases in the density (opacity) of the visible emissions.

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 011 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall maintain a record of all daily visual monitoring of the facility property conducted pursuant to the 25 Pa. Code § 127.511 Monitoring Requirement (above in Condition #010) in this section of the permit.
- (b) This recordkeeping shall contain a listing or notation of any and all sources of visual fugitive emissions deviating from 25 Pa. Code §123.1 or abnormal visible emissions; the cause of the visual fugitive emission deviating from 25 Pa. Code §123.1 or abnormal visible emissions; duration of the emission; and the corrective action taken to abate the deviation and prevent future occurrences.

#### # 012 [25 Pa. Code §127.512]

#### Operating permit terms and conditions.

The permittee can modify the mixture of pollutants regulated under Section 112 of the Clean Air Act (42 USCA 7412) which are VOCs or PM10 so long as the emission limitations of the permit are not violated. The permittee shall keep a log which identifies the mixture of pollutants regulated under section 112 and report the changes in the mixture of pollutants regulated under section 112 with the next report required to be provided to the Department.

#### # 013 [25 Pa. Code §129.100]

#### Compliance demonstration and recordkeeping requirements.

- (a) (c) [Not applicable]
- (d) The owner and operator of an air contamination source subject to this section and §§ 129.96--129.99 shall keep records to demonstrate compliance with §§ 129.96--129.99 in the following manner:
- (1) The records must include sufficient data and calculations to demonstrate that the requirements of §§ 129.96--129.99 are met.
- (2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
- (e) Beginning with the compliance date specified in § 129.97(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable NOx emission rate threshold specified in § 129.99(b) and the requirements of § 129.97 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.
- (f) Beginning with the compliance date specified in § 129.97(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable VOC emission rate threshold specified in § 129.99(c) and the requirements of § 129.97 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.
- (g) [Not applicable]
- (i) The records shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

#### [25 Pa. Code §135.5] # 014

#### Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including



computerized records that may be necessary to comply with §§ 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#### V. REPORTING REQUIREMENTS.

#### # 015 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- (a) The 6-month monitoring and deviation reports, required under Section B Condition #025, and any required semiannual compliance report, shall be submitted to the Department within 1 month of the end of the reporting period. The 6month deviation and semi-annual compliance report shall cover the following periods unless otherwise approved by the Department.
  - (1) January 1 through June 30;
  - (2) July 1 though December 31.
- (b) In accordance with 25 Pa. Code § 127.513 and with Section B Condition #026 of this permit, the annual compliance certification report shall be submitted to both the Department and EPA within 1 month of the end of the reporting period. The annual compliance certification shall cover the following period unless otherwise approved by the Department.
  - July 1 through June 30.
- (c) All submittals to the Department required by this permit shall be mailed to the following address.

Bureau of Air Quality Department of Environmental Protection 230 Chestnut Street Meadville, PA 16335 814-332-6940 (phone) 814-332-6121 (fax)

- (d) The addresses for EPA submittals are as follows.
  - (1) The mailing address is:

Section Chief U.S. Environmental Protection Agency Region III Enforcement and Compliance Assurance Division Air Section (3ED21) 1650 Arch Street Philadelphia, PA 19103-2029

(2) Electronic compliance certifications may be sent to the EPA at the following email address.

R3\_APD\_Permits@epa.gov

Include the following in the email subject line:

• name of facility, state, and Title V operating permit number.

#### # 016 [25 Pa. Code §135.21]

#### **Emission statements**

- (a) Except as provided in subsection (d), this section applies to stationary sources or facilities:
- (1) Located in an area designated by the Clean Air Act as a marginal, moderate, serious, severe or extreme ozone nonattainment area and which emit oxides of nitrogen or VOC.
  - (2) Not located in an area described in paragraph (1) and included in the Northeast Ozone Transport Region which





emit or have the potential to emit 100 tons or more of oxides of nitrogen or 50 tons or more of VOC per year.

- (b) The owner or operator of each stationary source emitting oxides of nitrogen or VOCs shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.
- (c) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:
  - (1) A more frequent submission is required by the EPA.
  - (2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.
- (d) [Paragraph (d) of the regulation is not applicable to this facility.]

#### WORK PRACTICE REQUIREMENTS.

#### [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

- (a) (b) [Paragraphs (a) and (b) of 25 Pa. Code § 123.1 are printed under Emission Restrictions in this section of permit.]
- (c) A person responsible for any source specified in 25 Pa. Code § (a)(1) -- (7) or (9) [Condition 001 above] shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:
- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
  - (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.
- (d) [Paragraph (d) of the regulation is not applicable to this facility.]

#### # 018 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Process unit turnarounds. Purging of volatile organic compounds during depressurization of reactors, fractionating columns, pipes, or vessels during unit shut-down, repair, inspection, or startup shall be performed in such a manner as to direct the volatile organic vapors to a fuel gas system, flare, or vapor recovery system until the internal pressure in such equipment reaches 19.7 psia (136 kilopascals).

[Authority for this condition is also derived from 25 Pa. Code §129.91]

#### [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pumps and compressors. Pumps and compressors handling volatile organic compounds with a vapor pressure of greater than 1.5 psi (10.3 kilopascals) at actual conditions shall have mechanical seals. For the purpose of determining vapor pressure, a temperature no greater than 100 °F shall be used.





[Authority for this condition is also derived from 25 Pa. Code §129.91]

#### VII. ADDITIONAL REQUIREMENTS.

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#### # 020 [25 Pa. Code §127.11]

#### Plan approval requirements.

The permittee may not construct or modify a new source at the facility unless the "new source," as defined in 25 Pa. Code § 121.1, meets the best available technology requirements established by the Department under section 6.6(c) of the Air Pollution Control Act and 25 Pa. Code § 127.11.

#### # 021 [25 Pa. Code §129.96] **Applicability**

- (a) The NOx requirements of this section and §§ 129.97--129.100 apply Statewide to the owner and operator of a major NOx emitting facility and the VOC requirements of this section and §§ 129.97--129.100 apply Statewide to the owner and operator of a major VOC emitting facility that were in existence on or before July 20, 2012, for which a requirement or emission limitation, or both, has not been established in §§ 129.51--129.52c, 129.54--129.63, 129.64--129.69, 129.71--129.75, 129.77, 129.101--129.107 and 129.301--129.310.
- (b) The NOx requirements of this section and §§ 129.97--129.100 apply Statewide to the owner and operator of a NOx emitting facility and the VOC requirements of this section and §§ 129.97--129.100 apply Statewide to the owner and operator of a VOC emitting facility when the installation of a new source or a modification or change in operation of an existing source after July 20, 2012, results in the source or facility meeting the definition of a major NOx emitting facility or a major VOC emitting facility and for which a requirement or an emission limitation, or both, has not been established in §§ 129.51--129.52e, 129.54--129.69, 129.71--129.75, 129.77, 129.101--129.107 and 129.301--129.310.
- (c) This section and §§ 129.97--129.100 do not apply to the owner and operator of a NOx air contamination source located at a major NOx emitting facility that has the potential to emit less than 1 TPY of NOx or a VOC air contamination source located at a major VOC emitting facility that has the potential to emit less than 1 TPY of VOC.
- (d) This section and §§ 129.97--129.100 do not apply to the owner and operator of a facility which is not a major NOx emitting facility or a major VOC emitting facility on or before January 1, 2017.

#### VIII. **COMPLIANCE CERTIFICATION.**

The permittee shall submit within thirty days of 06/30/2010 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit, and annually thereafter.

### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

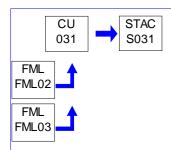
#### \*\*\* Permit Shield In Effect \*\*\*



Source ID: 031 Source Name: #1 BOILER, GAS/OIL, 66 MILLION BTU/HR

Source Capacity/Throughput: 66.000 MMBTU/HR

550.000 Gal/HR DISTILLATE OIL
66.000 MCF/HR Natural Gas



#### I. RESTRICTIONS.

#### **Emission Restriction(s).**

# # 001 [25 Pa. Code §123.11]

#### **Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of 0.344 pounds per million Btu of heat input, as determined by the following:

 $A = 3.6E^{(-0.56)}$ 

where

A = Allowable emissions in pounds per million BTUs of heat input;

E = Heat input to the combustion unit. [66 million Btu/hr for boiler 1]

 $3.6*[66^{(-0.56)}] = 0.287$ 

#### # 002 [25 Pa. Code §123.22]

#### **Combustion units**

- (a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:
- (1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period.
  - (2) Commercial fuel oil.
- (i) Except as specified in subparagraphs (ii) and (iii), a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in nonair basin areas if the commercial fuel oil contains sulfur in excess of the applicable maximum allowable sulfur content set forth in the following table:

Maximum Allowable Sulfur Content Expressed as Parts per Million (ppm) by Weight or Percentage by Weight

 Grades Commercial Fuel Oil (Consistent with ASTM D396)
 Through Aug. 31, 2020
 Beginning Sep. 1, 2020

 No. 2 and lighter oil
 500 ppm (0.05%)
 15 ppm (0.0015%)

 No. 4 oil
 2,500 ppm (0.25%)
 2,500 ppm (0.25%)

 No. 5, No. 6 and heavier oil
 5,000 ppm (0.5%)
 5,000 ppm (0.5%)

- (ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to September 1, 2020, which met the applicable maximum allowable sulfur content for commercial fuel oil through August 31, 2020, in subparagraph (i) at the time it was stored, may be used by the ultimate consumer in this Commonwealth on and after September 1, 2020.
  - (iii) (iv) [Refer to regulation for paragraphs (iii)-(iv).]
  - (4) [Refer to regulation for paragraph (4).]







- (b) (e) [Not applicable to this facility.]
- (f) Sampling and testing.
- (1) For the purpose of determining compliance with the requirements of this section, the actual sulfur content of commercial fuel oil shall be determined by one of the following:
- (i) In accordance with the sample collection, test methods and procedures specified under § 139.16 (relating to sulfur in fuel oil).
  - (ii) Other methods developed or approved by the Department or the Administrator of the EPA, or both.
- (2) A refinery owner or operator who produces commercial fuel oil intended for use or used in this Commonwealth is required to sample, test and calculate the actual sulfur content of each batch of the commercial fuel oil as specified in paragraph (1).
- (3) Prior to offering for sale, delivering for use, exchanging in trade or permitting the use of commercial fuel oil in this Commonwealth, a person other than the ultimate consumer that accepts a shipment of commercial fuel oil from a refinery or other transferor, shall sample, test and calculate the actual sulfur content of the commercial fuel oil in accordance with paragraph (1) if the shipment lacks the record required under subsection (g)(1) that enables the transferee to determine if the sulfur content of the shipment of commercial fuel oil meets the applicable maximum allowable sulfur content.
- (g) (h) [Refer to regulation for recordkeeping and reporting requirements and written request.]

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall not permit the emissions of NOx into the outdoor atmosphere in excess of the following:

- (a) When burning natural gas: 0.1 lbs per million Btu
- (b) When burning fuel oil: 0.14 lbs per million Btu

[From condition #4 of RACT operating permit OP 10-027 issued May 31, 1995. Authority for this condition is also derived from 25 Pa. Code §129.92 pertaining to RACT proposal requirements. These limits were incorporated into the SIP as promulgated October 12, 2001, in 66 FR 52044.]

#### Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee may only fired natural gas, commercial fuel oil and Penreco's own off-specification oil. The off-specification oil includes oil from onsite oil/water separators and other onsite processes, and a small amount of used oil from it's onsite garage.

#### II. TESTING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall test each boiler for the NOx emission rate, annually, using a portable analyzer. The Department may require annual stack tests in accordance with EPA reference methods pending the submission of the results from the portable analyzer.

[From RACT operating permit OP 10-027.] [Authority for this condition is also derived from 25 PA Code 129.92]

# 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The owner or operator shall conduct, on a semi annual basis, if the boiler is operational during that semi-annual period, a fuel analysis of oil that is burned in the boiler. The analysis shall consist of the btu value, moisture, ash, and sulfur content





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(% by weight) of oil in accordance with 25 Pa. Code §139.16 when the boiler has burned such oil. If 2 semi-annual tests in succession shows sulfur content (% by weight) below the value specified in Condition #001 of the operating permit, the testing frequency becomes annually. However if at a later time the sulfur content exceeds the specified value, the testing shall revert back to semi-annually. Natural gas testing shall not be required.

[25 Pa. Code §127.511]

#### Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall conduct a 40 CFR 60 Appendix A Method 9 observation of the exhaust stack for (Source 031) on a semi-annual basis. If the opacity does not exceed 20% during the first two semi-annual observations, the frequency of the Method 9 opacity observations will become annually. In no case shall any two Method 9 observations, on the same boiler, be less than 30 days apart.
- (b) The Method 9 observations shall be conducted while the source is in a normal operating mode. The Method 9 observations shall not occur during start up or shut down periods.

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### RECORDKEEPING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records including a certification from the fuel supplier of the type of fuel and for each shipment from an outside vendor of distillate oils number 1 or 2, a certification that the fuel complies with ASTM D396-78 "Standard Specifications for Fuel Oils".

[Authority for this condition is also derived from 25 Pa. Code § 129.92.]

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record each adjustment conducted as required by Condition #009 in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

- (1) The date of the tuning procedure;
- (2) The name of the service company and technicians.
- (3) The final operating rate or load.
- (4) The final CO and NOx emission rates.
- (5) The final excess oxygen rate.

[Authority for this condition is also derived from 25 Pa. Code § 129.93.]

#### #010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my notification, reporting, and recordkeeping requirements?

- (a) [Paragraph 63.11225(a) is printed under ADDITIONAL REQUIREMENTS in this section of permit.]
- (b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.



- (1) Company name and address.
- (2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
- (i) "This facility complies with the requirements in § 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
- (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
- (iii) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
- (3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.
  - (4) [Not applicable.]
- (c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.
- (1) As required in § 63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.
- (2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by § 63.11214 and § 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.
- (i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
  - (ii) [Not applicable.]
- (iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.
  - (iv) (vi) [Not applicable.]
  - (3) [Not applicable.]
- (4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in § 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
  - (6) (7) [Not applicable.]
- (d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location



by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(e) - (f) [Not applicable.]

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(g) [Paragraph (g) is printed under REPORTING REQUIREMENTS in this section of the permit.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

#### V. REPORTING REQUIREMENTS.

#### # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11210]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my initial compliance requirements and by what date must I conduct them?

- (a) (b) [Not applicable.]
- (c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.

[The initial compliance demonstrations were one-time requirements that have already been met as certified by the permittee in the December 13, 2013, submittal of the Notification of Compliance Status.]

- (d) (h) [Not applicable.]
- (i) For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJJ or the boiler becoming subject to subpart JJJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g).
- (j) (k) [Not applicable.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7507, Feb. 1, 2013; 81 FR 63125, Sept. 14, 2016]

#### # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate initialcompliance with the work practicestandard, emission reduction measures, and management practice?

[This condition no longer has any requirements. The condition remains in the permit to document that these one-time requirements have already been met.]

- (a) [Not applicable.]
- (b) [Paragraph (b) consists of 2 one-time requirements which have already been met. The initial tune-up was conducted on August 12, 2013, as documented on the Notification of Compliance Status report submitted on December 13, 2013, and filed in DEP NWRO file AQ/Facilities/CASE/10-000-00027]
- (c) [Paragraph (c) is a one-time requirement which was already met with the December 13, 2013, submission of the Notification of Compliance Status indicating that the required energy assessment of the boiler was completed on December 2, 2013. A copy of the Notification of Compliance Status is on file in the DEP NWRO file AQ\Factilties\Case\10-000-00027.]
- (d) [Not applicable.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013; 81 FR 63126, Sept. 14, 2016]





### # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my notification, reporting, and recordkeeping requirements?

- (a) [Paragraph 63.11225(a) is printed under ADDITIONAL REQUIREMENTS in this section of permit.]
- (b) (d) [Paragraphs 63.11225(b)-(d) are printed under RECORDKEEPING REQUIREMENTS in this section of permit.]
- (e) (f) [Not applicable.]
- (g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or you have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to this subpart, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:
- (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
  - (2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall perform an annual adjustment or tuneup. This adjustment shall include, at a minimum, the following:
- (1) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx, and to the extent practicable minimize emissions of CO.
- (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) Source 031 (Boiler #1) shall make the annual adjustment in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers" September 1983 (EPA-340/1-83-023) or equivalent procedures approves in writing by the Department. [EPA Document 340183023 may be downloaded from the following web address: https://nepis.epa.gov/EPA/html/Pubs/pubalpha\_C.html.]

[Authority for this condition is also derived from 25 Pa. Code §129.93]

#### # 015 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

The owner and operator of a combustion unit or other combustion source located at a major VOC emitting facility subject to § 129.96 shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions from the combustion unit or other combustion source.

[From the presumptive RACT II requirement of 25 Pa. Code § 129.97(d).] [This condition is also derived from and assures compliance with condition # 10 of RACT operating permit OP 10-027.]





# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart JJJJJJ Table 2]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Subpart JJJJJJ of Part 63 Work Practice Standards, Emission Reduction Measures, and Management Practices

[Reprinted below is text from Categories 4 and 16 of Table 2; non-appliable categories of Table 2 are omitted from this permit.]

As stated in § 63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

You must conduct a tune-up of the boiler biennially as specified in § 63.11223.

[The initial tune-up as specified in § 63.11214 was conducted on August 12, 2013.]

[The requirement for a one-time energy assessment performed by a qualified energy assessor has already been met and is no longer applicable. The energy assessment was performed on December 2, 2013, as certified by the permittee on the December 13, 2013, Notification of Compliance Status.]

[78 FR 7518, Feb. 1, 2013, as amended at 81 FR 63129, Sept. 14, 2016]

# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11201]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What standards must I meet?

- (a) [Not applicable.]
- (b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. [Non-applicable text from the regulation is omitted from this paragraph.] [Applicable requirements of Table 2 are printed in a separate condition in this section of the permit.]
- (c) [Not applicable.]
- (d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in § 63.11237, during which time you must comply only with Table 2 to this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

# 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11205]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my general requirements for complying with this subpart?

- (a) 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 that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (b) (c) Not applicable.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]





### # 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate initial compliance with the work practicestandard, emission reduction measures, and management practice?

- (a) Not applicable.
- (b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.
- (c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility.
- (d) Not applicable.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate continuous compliance with the work practice and management practice standards?

- (a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in § 63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
- (b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. [Non-applicable text in regulation is omitted from this paragraph.]
- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). [Text in regulation that is not applicable to this source is omitted from this paragraph.]
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). [Text in regulation that is not applicable to this source is omitted from this paragraph.]
- (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.







- (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
  - (ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
- (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
  - (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
- (c) (g) [Not applicable.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7509, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

#### VII. ADDITIONAL REQUIREMENTS.

### # 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

#### Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

[Source: 76 FR 15591, Mar. 21, 2011]

#### # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11194]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

#### What is the affected source of this subpart?

- (a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.
- (1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source.
  - (2) Not applicable.
- (b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.
- (c) (d) Not applicable.
- (e) An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010, due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel.
- (f) Not applicable.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

#### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11196]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources



### What are my compliance dates?

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- (a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.
- (1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management practice standard no later than March 21, 2014.

The permittee submitted a Notification of Compliance Status for 40 CFR Part 63 Subpart JJJJJJ on December 13, 2013, indicating that the tune-up was completed on August 12, 2013. A copy of the Notification of Compliance Status is filed in DEP NWRO AQ Case file 10-000-00027.]

- (2) [Not applicable.]
- (3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

The permittee submitted a Notification of Compliance Status for 40 CFR Part 63 Subpart JJJJJJ on December 13, 2013, indicating that the one-time energy assessment was completed on December 2, 2013. A copy of the Notification of Compliance Status is filed in DEP NWRO AQ Case file 10-000-00027.]

(b) - (d) [Not applicable.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

#### # 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11200]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and **Institutional Boilers Area Sources** 

What are the subcategories of boilers?

The subcategories of boilers, as defined in §63.11237 are:

- (a) Coal.
- (b) Biomass.
- (c) Oil.
- (d) Seasonal boilers.
- (e) Oil-fired boilers with heat input capacity of equal to or less than 5 million British thermal units (Btu) per hour.
- (f) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up.
- (g) Limited-use boilers.

[78 FR 7506, Feb. 1, 2013]

### [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and **Institutional Boilers Area Sources** 

What are my notification, reporting, and recordkeeping requirements?

The requirements of this condition are one-time requirements which have already been met. This condition remains in the permit in order to document that the notifications have been completed.]

(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.



- (1) You must submit all of the notifications in §§ 63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section. [Note: only 63.9(b) for initial notification and 63.9(h)for notification of compliance status are applicable; 63.7(b), 63.8(e)-(f), 63.9(c)-(e), and 63.9(g) are not applicable to this source.]
- (2) [Paragraph 63.11225(a)(2) requiring an initial notification is a one-time requirement that was already met with the June 19, 2012, submittal of the Initial Notification Report which is filed in PA DEP NWRO AQ Case file 10-000-00027.]
  - (3) [Not applicable.]

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- (4) [Paragraph 63.11225(a)(2) requiring submittal of a Notification of Compliance Status is a one-time requirement that was already met with the December 13, 2013, submittal indicating that the initial tune-up and the energy assessment have been completed.]
  - (5) [Not applicable.]
- (b) (d) [Paragraphs 63.11225(b)-(d) are printed under RECORDKEEPING REQUIREMENTS in this section of permit.]
- (e) (f) [Not applicable.]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

# 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11235]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

# 027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11237]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What definitions apply to this subpart?

[Selected definitions are printed below. Refer to regulation for remaining definitions pertaining to Subpart JJJJJJ.]

Annual capacity factor means the ratio between the actual heat input to a boiler from the fuels burned during a calendar year and the potential heat input to the boiler had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Boiler system means the boiler and associated components, such as, feedwater systems, combustion air systems, fuel systems (including burners), blowdown systems, combustion control systems, steam systems, and condensate return systems, directly connected to and serving the energy use systems.

Calendar year means the period between January 1 and December 31, inclusive, for a given year.

#### Deviation

- (1) Means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
- (i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or
- (ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.
  - (2) A deviation is not always a violation.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil





numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §63.14).

Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Limited-use boiler means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable annual capacity factor of no more than 10 percent.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, used oil meeting the specification in 40 CFR 279.11, liquid biofuels, biodiesel, and vegetable oil.

Oil subcategory includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Gasfired boilers that burn liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or for periodic testing are not included in this definition. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Shutdown means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.

### Startup means:

- (1) Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or
- (2) The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating, cooling or process purposes or producing electricity, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends 4 hours after when the boiler supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, whichever is earlier.

Tune-up means adjustments made to a boiler in accordance with the procedures outlined in §63.11223(b).

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013; 81 FR 63128, Sept. 14, 2016]

# \*\*\* Permit Shield in Effect. \*\*\*



Source ID: 034 Source Name: HYDROTREATER REFORMER FURNACE

Source Capacity/Throughput: 8.100 MMBTU/HR

8.100 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 2 - FURNACES & PROCESS HEATERS



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Authority for this condition is also derived from 25 PA Code 129.93]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### \*\*\* Permit Shield in Effect. \*\*\*



Source ID: 035 Source Name: HYDROTREATER H1X REACTOR FURNACE

Source Capacity/Throughput: 9.100 MMBTU/HR

9.100 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 2 - FURNACES & PROCESS HEATERS



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Authority for this condition is also derived from 25 PA Code 129.93]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### \*\*\* Permit Shield in Effect. \*\*\*



Source ID: 036 Source Name: HYDROTREATER H2 STRIPPER FURNACE

Source Capacity/Throughput: 2.100 MMBTU/HR

2.100 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 2 - FURNACES & PROCESS HEATERS



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Authority for this condition is also derived from 25 PA Code 129.93]

# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 040 Source Name: #3 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR

> Source Capacity/Throughput: 91.000 MMBTU/HR

> > 91.000 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 1 - BOILERS 2 & 3



### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### **WORK PRACTICE REQUIREMENTS.** VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



Source ID: 041 Source Name: #2 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR

Source Capacity/Throughput: 91.000 MMBTU/HR

91.000 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 1 - BOILERS 2 & 3



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

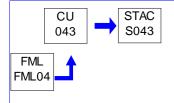
# \*\*\* Permit Shield in Effect. \*\*\*



Source ID: 043 Source Name: EMERGENCY DIESEL GENERATOR ENGINE (764 BHP)

Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 6 - 63-ZZZZ, EXISTING ENGINES



### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) (1) The permittee shall comply with the Total Hydrocarbon (THC) emission standard of 1.0 gm/bhp-hr.
  - (2) The permittee shall comply with the NOx emission standard of 6.9 gms/hp-hr.
  - (3) The permittee shall comply with the CO emission standard of 2.0 gms/bhp-hr.
  - (4) The Particulate Matter (PM) emissions from the engine shall not exceed 0.4 gms/bhp-hr
  - (5) The visible emissions from the diesel engine(s) stack shall not exceed the following limitation
- (i) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
  - (ii) Equal or greater than 30% at any time
- (b) The emission limitations listed above shall apply at all times except during periods of start-up and shut-down, provided, however, that the duration of start-up and shut-down do not exceed one hour per occurrence.

[From BAQ-GPA/GP 9 (Rev. March 17, 2005), Conditions 7b & 19.]

### Fuel Restriction(s).

### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall only burn diesel fuel
- (b) The sulfur content in the diesel fuel shall not, at any time exceed 0.3 percent by weight

[From BAQ-GPA/GP 9 (Rev. March 17, 2005), Condition # 7(b)(iv)]

### **Operation Hours Restriction(s).**

# # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The actual annual operating time of 764 bhp diesel emergency generator of Source 043 shall be less than 950 hours.

[This operating permit condition assures that the source will remain in compliance with GP-9 (Revision March 15, 2005) conditions # 7.b.ii and 7.b.iii which require CO and NOx controls for annual operating hours greater than or equal to 1,500 hours and 950 hours respectively.]





### II. TESTING REQUIREMENTS.

# # 004 [25 Pa. Code §127.12b] Plan approval terms and conditions.

- (a) (c) [Not applicable]
- (d) The Department reserves the right to require stack test in accordance with EPA reference methods should the data from the portable analyzer warrant such tests. The purpose of this test is to demonstrate compliance with the emission limitations required for the new engine(s).
- (e) The Department may accept the vendor guarantees or recent on-site test data on similar engines, or other means approved by the Department as a verification of NOx emissions from a diesel engine that are less than 10 tons per year. [The Department approved the use of the vendors guaranteed NOx emissions at the time of the issuance of the general plan approval and operating permit.]
- (f) If performance of stack tests are required for the demonstration of compliance with applicable emissions limits, the owner or operator of the affected facility shall comply with the following requirements:
- (i) Within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but no later than one hundred eighty (180) days after the initial start-up of the source, the owner or operator shall demonstrate compliance with the applicable emission limits.
- (ii) At least sixty (60) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
  - (iii) At least thirty (30) days prior to the test, the Department shall be informed of the date and time of the test.
- (iv) Within sixty (60) days after the source test(s), two copies of the completed test report, including all operating conditions, shall be submitted to the Department.

[From BAQ-GPA/GP 9 (Rev March 17, 2005), Condition 8(a) - (f)]

# III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

### # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall maintain comprehensive accurate records, which at a minimum, shall include:
- (i) The number of hours per calendar year that each engine or piece of equipment operated using non-reset table hour meter.
  - (ii) The amount of fuel used per calendar year in each engine or piece of equipment.
- (b) If the permittee is required to perform a stack test, the permittee shall maintain records or report of the following:
- (i) Records including a description of testing methods, results, all engine operating data collected during the test and a copy of the calculations performed to determine compliance with emissions standards.
- (ii) Copies of the report that demonstrates that the engine(s) were operating at rated brake horsepower and rated speed conditions during performance testing.





- (iii) Submittal of reports in accordance with the requirements and schedules outlined in this Diesel Engine(s) General Permit.
- (c) These records shall be retained for a minimum of 5 years and shall be made available to the Department upon request. The Department reserves the right to expand the list contained in this section as it may reasonably prescribe pursuant to the provisions of Section 4 of the Pennsylvania Air Pollution Control Act (35 P.S. §§40040), and as it may deem necessary to determine compliance with any condition contained herein.

[From BAQ-GPA/GP 9 (Rev. March 17, 2005), Condition 9 (a) - (c).]

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

# 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The diesel-fired internal combustion engine(s) shall be:

- (a) Operated in such a manner as not to cause air pollution;
- (b) Operated and maintained in a manner consistent with good operating and maintenance practices; and
- (c) Operated and maintained in accordance with the manufacturer's specifications and applicable terms and conditions of this permit.

[From BAQ-GPA/GP-9 (Rev. March 17, 2005), Condition # 4. This condition is also derived from and assures compliance with the presumptive RACT II requirement of 25 Pa. Code § 129.97(c)(8).]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



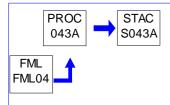


Source ID: 043A Source Name: EMERGENCY DIESEL FIRE WATER PUMP ENGINE (208 HP)

> Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

6 - 63-ZZZZ, EXISTING ENGINES



#### RESTRICTIONS. L

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### WORK PRACTICE REQUIREMENTS. VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



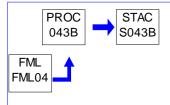


Source ID: 043B Source Name: EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP)

> Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

6 - 63-ZZZZ, EXISTING ENGINES



#### RESTRICTIONS. L

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### WORK PRACTICE REQUIREMENTS. VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





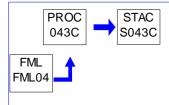


Source ID: 043C Source Name: EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE (38 HP)

> Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

6 - 63-ZZZZ, EXISTING ENGINES



#### RESTRICTIONS. L

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### WORK PRACTICE REQUIREMENTS. VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### ADDITIONAL REQUIREMENTS. VII.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





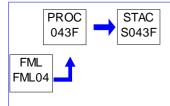


Source ID: 043F Source Name: EMERGENCY DIESEL BACKUP GEN FOR BOILER INSTRUMENTS (66 HP)

> Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

6 - 63-ZZZZ, EXISTING ENGINES



#### RESTRICTIONS. L

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### WORK PRACTICE REQUIREMENTS. VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### ADDITIONAL REQUIREMENTS. VII.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



# Z

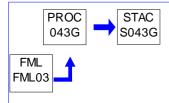
# **SECTION D.** Source Level Requirements

Source ID: 043G Source Name: EMERGENCY NAT GAS GENERATOR FOR HYDROTREATER (67 HP)

Source Capacity/Throughput: 1.000 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

8 - 60-JJJJ, NEW GAS ENGINES



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### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



# 10-00027



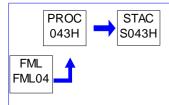
#### SECTION D. **Source Level Requirements**

Source ID: 043H Source Name: EMERGENCY DIESEL BACKUP FOR WW TREATMENT ENGINE (149 HP)

> Source Capacity/Throughput: 1.000 Gal/HR Diesel Fuel

Conditions for this source occur in the following groups: 5 - EXEMPT ENGINES

7 - 60-IIII, NEW DIESEL ENGINES



#### RESTRICTIONS. L

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### WORK PRACTICE REQUIREMENTS. VI.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### ADDITIONAL REQUIREMENTS. VII.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



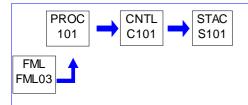




Source ID: 101 Source Name: RETORT PROCESS (2 FURNACES)

> Source Capacity/Throughput: 5.400 MCF/HR NATURAL GAS

> > **BAUXITE PER RETORT** 2.500 Tons/HR



#### RESTRICTIONS.

### **Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

#### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

# Fuel Restriction(s).

# 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall only burn natural gas.

# **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### III. MONITORING REQUIREMENTS.

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the operating temperature of the furnace(s) a minimum of once per 8 hour shift, when the source(s) are in operation.

[From plan approval 10-027H, Section D, Source 101, Condition #001.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

### IV. RECORDKEEPING REQUIREMENTS.

# 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall maintain records of operating temperature monitoring, which shall include records of any corrective actions taken due to temperatures below 900 °F.
- (b) All required records shall be maintained for a minimum of 5 years and shall be made available to the Department upon request.





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#### SECTION D. **Source Level Requirements**

[From plan approval 10-027H, Section D, Source 101, Condition #002.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code §129.99. This condition is included in the SIP.]

# 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VI. WORK PRACTICE REQUIREMENTS.

# 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The source and control device shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[From plan approval 10-027H, Section D, Source 101, Condition #003.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code §129.93. This condition is included in the SIP.]

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) During bauxite regeneration, furnace temperatures shall be maintained at a minimum of 900 °F.
- (b) If furnace temperatures of < 900 °F are observed, the permittee shall immediately cease bauxite addition to the furnace(s), and shall take appropriate corrective action.

[From plan approval 10-027H, Section D, Source 101, Condition #004.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source and control device shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Authority for this condition is also derived from 25 PA Code 129.93]

[25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee should not operate both retort process heaters simultaneously.

# 011 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall operate the control device at all times that this source is in operation.

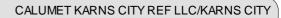
### ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*



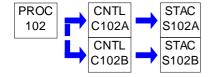




Source ID: 102 Source Name: OLEUM PROCESS

> Source Capacity/Throughput: 4,800.000 Gal/HR WHITE OIL

440.000 Gal/HR **OLEUM** 



#### RESTRICTIONS. L

# **Emission Restriction(s).**

10-00027

#### # 001 [25 Pa. Code §123.13]

#### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in: 10-027A condition 5]

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in: 10-027A condition 4]

#### TESTING REQUIREMENTS. П.

#### # 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall test annually, using Drager tubes within the range of 20-200 ppm, for SOx, expressed as SO2.
- (b) If during one of these tests, the SOx concentration exceeds 200 ppm, the permittee will retest to determine the SOx concentration within 2 weeks.
- (c) If the SOx, expressed as SO2, concentration exceeds 300 ppm, the permittee will test on a semi-annual basis.
- (d) If two semi-annual tests in succession show SOx, expressed as SO2, concentration below 300 ppm, testing can revert back to an annual basis.
- (e) The permittee may use a similar product with the prior approval of the Department if this particular Drager tube product becomes unavailable.

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





# CALUMET KARNS CITY REF LLC/KARNS CITY

#### SECTION D. **Source Level Requirements**

# RECORDKEEPING REQUIREMENTS.

10-00027

#### # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) A pressure gauge shall be permanently installed and maintained at a conveniently readable location to indicate the vacuum drawing vapors from all sources. Readings shall be recorded daily and the records kept for a minimum of five vears.
- (b) The facility shall monitor the pressure that is induced into the scrubber jets. Reading shall be recorded daily and the records kept for a minimum of five years.

[From Plan Approval 10-027A Conditions 6 & 7 and Plan Approval 10-027B Conditions 7 & 8 and Plan Approval 10-027F, Section D, Source 102, Condition #005.1

#### # 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall maintain a record of all preventive maintenance inspections of the control device.
- (b) These records shall, at a minimum, contain the following:
  - (1) dates of the inspections,
  - (2) any problems or defects,
  - (3) the actions taken to correct the problem or defects,
  - (4) any routine maintenance performed, and
  - (5) the pressure drop across the control device.

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

#### # 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall perform a daily preventative maintenance inspection on the control device.
- (b) The permittee shall operate the control device at all times that this source is in operation.
- (c) The source and control device shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*

10-00027



#### SECTION D. **Source Level Requirements**

Source ID: 105 Source Name: ALCOHOL STORAGE AND HANDLING

> Source Capacity/Throughput: 600.000 Gal/HR **ALCOHOL**

Conditions for this source occur in the following groups: 3 - ALCOHOL & GASOLINE STORAGE



# RESTRICTIONS.

# **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from the condenser vent shall not exceed either of the following:

- (a) 7.4 lbs/hr;
- (b) 6.2 tons per year, on a 12-month rolling basis.

[From plan approval 10-027H, Section D, Source 105, Condition #001.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

#### # 002 [25 Pa. Code §129.72]

## Manufacture of surface active agents

No person may cause, suffer or permit the emission into the outdoor atmosphere of volatile organic compounds from solvent wash tanks, reaction vessels, separaters, distillation processes, solvent strippers, and solvent storage tanks unless the emissions are exhausted through an emission reduction system which is designed and operated to recover or destroy at least 90 percent by weight of the volatile organic compound emissions.

#### TESTING REQUIREMENTS. II.

#### # 003 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

- (a) Within 180 days of commencement of operation of the refrigerated condenser, the permittee shall conduct a stack test for VOC in order to demonstrate compliance with the emission limits set forth in this permit. An extension may be granted by the Department provided that the permittee submits a written request at least 60 days prior to the end of the 180 days.
- (b) Repeat stack testing of this source for VOC shall be conducted a minimum of once within each subsequent 5-year period following the initial stack test.
- (c) The stack tests shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department to demonstrate compliance with the emission limits for this source. Appropriate U.S. EPA Reference Methods shall be used to determine the emission rates of all pollutants. Testing shall occur when the subject source(s) are operating at maximum normal operating conditions.
- (d) Pursuant to 25 Pa. Code § 139.3 to at least 90 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (e) Pursuant to 25 Pa. Code § 139.3 at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (f) Pursuant to 25 Pa. Code Section 139.53(a)(3) within 15 calendar days after completion of the on-site testing portion of an





emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring indicating the completion date of the on-site testing.

- (g) Pursuant to 40 CFR Part 60.8(a), 40 CFR Part 61.13(f) and 40 CFR Part 63.7(g) a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program. For those tests being conducted pursuant to 40 CFR Part 61, the, a complete test report shall be submitted within 31 days after completion of the test.
- (h) Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (2) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (3) Summary of results with respect to each applicable permit condition.
  - (4) Statement of compliance or non-compliance with each applicable permit condition.
- (i) Pursuant to 25 Pa. Code § 139.3 to all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (j) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (k) Pursuant to 25 Pa. Code § 139.53(a)(1) and § 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal can not be accomplished, one electronic copy of the submittal shall be sent to both PSIMS Administration in Central Office and to Regional Office AQ Program Manager. Electronic copies shall be sent to the following email addresses:

**CENTRAL OFFICE:** 

RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:

RA-EPNWstacktesting@pa.gov

- (I) The permittee shall insure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed. including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.
- (m) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (n) If the results of the required stack test exceed any limit defined in this permit, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the permit, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the permit, not performing the test in accordance with the stack test protocol or



# 10-00027



# **SECTION D.** Source Level Requirements

not operating the source and/or air cleaning device in accordance with the permit may be grounds for immediate revocation of the permit to operate the affected source.

[From plan approval 10-027H, Section D, Source 105, Condition #003.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

### III. MONITORING REQUIREMENTS.

## # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following are CAM requirements.

- (a) The permittee shall measure the condenser outlet vent temperature at least one time per agitator batch.
- (b) The permittee shall conduct inspection and corrective action upon any excursion of the temperature. An excursion is defined as a condenser outlet temperature greater than 50 °F.
- (c) If more than 6 excursions occur in any semi-annual reporting period, the permittee shall develop a Quality Improvement Plan (QIP) in accordance with 40 CFR § 64.8.
- (c) The permittee shall perform a calibration of the thermocouple at least one time per year.

[Authority for this condition is derived from the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64.]

### IV. RECORDKEEPING REQUIREMENTS.

### # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall monitor and record the following process parameters a minimum of once per batch:
  - (1) Agitator temperature
  - (2) Quantity of alcohol added
  - (3) Condenser outlet temperature
- (b) All required records shall be maintained on site for a minimum of 5 years and shall be made available to the Department upon request.

[From plan approval 10-027H, Section D, Source 105, Condition #004.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

## # 006 [25 Pa. Code §127.12b]

# Plan approval terms and conditions.

The permittee shall maintain a record of all preventative maintenance inspections of the source(s) and control device.

These records shall, at a minimum, contain

- the dates of the inspections,
- any problems or defects,
- the actions taken to correct the problems or defects,
- and any routine maintenance performed.

[From plan approval 10-027H, Section D, Source 105, Condition #005.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

### # 007 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The following are CAM requirements.

(a) Records of the condenser outlet vent temperature monitoring shall be maintained and consist of at least the following.





- (1) Date and time of the temperature reading;
- (2) Actual temperature of the condenser outlet vent;
- (3) Action taken for any excursion (any reading above 50 °F) along with time elapsed until corrective actions were taken;
- (4) Identity of person conducting the monitoring;
- (b) The permittee shall maintain records of all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). The permittee shall also record the dates, times and durations, probable causes and corrective actions taken for the incidents.
- (c) The permittee shall record all inspections, repairs, and maintenance performed on the monitoring equipment. The records of the maintenance and inspections shall include, at a minimum, the following.
  - (1) the date of the inspection, maintenance, or repair;
  - (2) any problems or defects identified;
  - (3) any actions taken to correct the problems or defects;
  - (4) any routine maintenance performed; and
  - (5) the identity of the person performing the inspection or maintenance or repair.
- (d) Records of the thermocouple calibrations shall be maintained and consist of at least the following.
  - (1) Date of calibration;
  - (2) Pass or fail of the calibration;
  - (3) Corrective action (if any);
  - (4) Identity of person or contractor conducting the calibration.
- (e) All records required by this condition shall be maintained for a period of no less than 5 years.

[Authority for this condition is derived from the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64.]

### V. REPORTING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following are CAM requirements.

(a) The permittee shall report all excursions and corrective actions taken, the dates, times, durations and probable causes, every 6 months.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.9 & 70.6(a)(3)(iii)(A).]

(b) The permittee shall report all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable), their dates, times and durations, probable causes and corrective actions taken, every 6 months.

[Additional authority for this permit condition is also derived from 40 CFR § 64.9.]

- (c) The permittee shall report the following information to the Department every 6 months:
- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (3) If applicable, a description of the actions taken to implement a quality improvement plan (QIP) during the semiannual reporting period. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.





[Additional authority for this permit condition is also derived from 40 CFR § 64.9(a).]

### VI. WORK PRACTICE REQUIREMENTS.

# 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall install, maintain, and operate the control device(s) in accordance with manufacturers' specifications and in accordance with good air pollution control practices.

[From plan approval 10-027H, Section D, Source 105, Condition #006.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

# 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The condenser outlet temperature shall be maintained at 50 °F or below.

[From plan approval 10-027H, Section D, Source 105, Condition #007.] [Authority for this condition is also derived from the RACT requirements of 25 PA Code § 129.99. This condition is included in the SIP.]

# 011 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

This 127.511 condition was included in the SIP submittal with the RACT II conditions from plan approval 10-027H.]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 106 Source Name: PLANT FUGITIVE VOC EMISSIONS

Source Capacity/Throughput: 1.000 Each/HR FLANGES, PUMPS, SEALS, VALV



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*







Source ID: 107 Source Name: WASTEWATER TREATMENT

> Source Capacity/Throughput: 21,000.000 Gal/HR WASTEWATER



10-00027

### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### WORK PRACTICE REQUIREMENTS. VI.

# 001 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

The source shall be installed, operated, and maintained in accordance with the manufacturer's specifications and in accordance with good operating practices.

[The presumptive RACT II requirement of 25 Pa. Code §129.97(c)(2) applies to this source.]

#### ADDITIONAL REQUIREMENTS. VII.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 109 Source Name: GASOLINE STORAGE

> Source Capacity/Throughput: 2.000 Gal/HR **GASOLINE**

Conditions for this source occur in the following groups: 3 - ALCOHOL & GASOLINE STORAGE



#### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §129.61]

# Small gasoline storage tank control (Stage 1 control)

- (a) A person may not transfer gasoline from a delivery vessel into a stationary storage tank unless the displaced vapors from the storage tank are transferred to the dispensing delivery tank through a vapor tight return line and unless the receiving tank is equipped with a submerged fill pipe which extends from the filling orifice to within 6 inches of the bottom of the tank. The vapors collected in the dispensing tank shall be disposed of in accordance with 25 Pa. Code §129.59 or §129.60(c) (relating to bulk gasoline terminals; and bulk gasoline plants).
- (b) The dispensing delivery tank shall remain vapor tight at all times. The delivery tank may be opened after the vapors are disposed of in accordance with 25 Pa. Code §129.59 or §129.60(c).

# 002 [25 Pa. Code §129.62]

### General standards for bulk gasoline terminals/plants, and small gasoline storage tanks

- (a) Gasoline may not be spilled or discarded in sewers or stored in open containers or handled in a manner that would result in uncontrolled evaporation to the atmosphere.
- (b) An owner or operator of a bulk gasoline plant, bulk gasoline terminal, tank truck or trailer or stationary storage tank to which 25 Pa. Code §129.59, §129.60(b) or (c) or §129.61 (relating to bulk gasoline terminals; bulk gasoline plants; and small gasoline storage tank control (Stage 1 control)) apply may not permit the transfer of gasoline between the tank truck or





trailer and a stationary storage tank unless the following conditions are met:

- (1) The vapor balance system is in good working order and is designed and operated in a manner that prevents:
- (i) Gauge pressure from exceeding 18 inches of H2O (4500 pascals) and vacuum from exceeding 6 inches of water (1500 pascals) in the gasoline tank truck.
- (ii) A reading equal to or greater than 100% of the lower explosive limit--LEL, measured as propane--at 1 inch from points on the perimeter of a potential leak source when measured by the method referenced in 139.14 (relating to emissions of volatile organic compounds) during loading or unloading operations at small gasoline storage tanks, bulk plants and bulk terminals.
- (iii) Avoidable liquid leaks during loading or unloading operations at small gasoline storage tanks, bulk plants and bulk terminals.
- (2) A truck, vapor balance system or vapor disposal system, if applicable, that exceeds the limits in paragraph (1) is repaired and retested within 15 days.
- (3) There are no visually- or audibly-detectable leaks in the tank truck's or trailer's pressure/vacuum relief valves and hatch covers, the truck tanks or storage tanks, or associated vapor and liquid lines during loading or unloading.
- (4) The pressure and vacuum relief valves on storage vessels and tank trucks or trailers are set to release at no less than .7 psig (4.8 kilopascals) of pressure or .3 psig (2.1 kilopascals) of vacuum or the highest allowable pressure and vacuum as specified in State or local fire codes, the National Fire Prevention Association guidelines or other National consensus standards acceptable to the Department. Upon demonstration by the owner or operator of an underground small gasoline storage tank that the vapor balance system specified in paragraph (1) will achieve a 90% vapor recovery efficiency without a pressure and vacuum relief valve and that an interlock system, sufficient to ensure connection of the vapor recovery line prior to delivery of the gasoline, will be used--no pressure and vacuum relief valve is required. The vacuum setting on the pressure and vacuum relief valve on an underground storage tank may be set at the lowest vacuum setting which is sufficient to keep the vent closed at zero pressure and vacuum.
- (c) A person may not allow a gasoline tank truck subject to 25 Pa. Code §129.59, §129.60 or §129.61 to be filled or emptied in a geographic area specified in §129.61(a) unless the gasoline tank truck:
- (1) Has been tested by the owner or operator within the immediately preceding 12 months in accordance with 25 Pa. Code §139.14.
- (2) Sustains a pressure change of no more than 750 pascals (3 inches of H2O) in 5 minutes when pressurized to a gauge pressure of 18 inches of H2O (4,500 pascals) or evacuated to a gauge pressure of 6 inches of H2O (1,500 pascals) during the testing required in paragraph (1).
- (3) Is repaired by the owner or operator and retested within 15 days of testing if it does not meet the criteria in paragraph (2).
- (4) Displays a clear marking near the Department of Transportation Certification plate required by 49 CFR 178.340-10b (relating to certification), which shows the most recent date upon which the gasoline tank truck passed the test required in this subsection.
- (d) Reporting and recordkeeping shall be as follows:
- (1) The owner or operator of a source of VOCs subject to subsection (c) shall maintain records of certification testing and repairs. The records shall identify the gasoline tank truck, vapor collection system or vapor control system; the date of the test or repair; and, if applicable, the type of repair and the date of retest. The records shall be maintained in a legible, readily-available condition for 1 year after the date the testing or repair was completed.
  - (2) The records of certification tests required by paragraph (1) shall contain:



- (i) The gasoline tank truck tank serial number.
- (ii) The initial test pressure and the time of the reading.
- (iii) The final test pressure and the time of the reading.
- (iv) The initial test vacuum and the time of the reading.
- (v) The final test vacuum and the time of the reading.
- (vi) At the top of each report page, the company name and the date and location of the tests on that page.
- (vii) The name and title of the person conducting the test.
- (3) Copies of records and reports under this subsection shall be made available to the Department upon verbal or written request at any reasonable time. A copy of the test results for each gasoline tank shall be kept with the truck.
- (e) Gasoline tank trucks with a rated capacity of less than 4,800 gallons are exempt from subsections (c) and (d).

#### # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11116] Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities

Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (b) You are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in Sec. 63.11113. [The compliance date was January 10, 2011.]
- (d) Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



# 10-00027

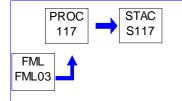


# **SECTION D.** Source Level Requirements

Source ID: 117 Source Name: NAPHTHA RERUN UNIT FURNACE

Source Capacity/Throughput: 2.500 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 2 - FURNACES & PROCESS HEATERS



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

## V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Authority for this condition is also derived from 25 PA Code 129.93]

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### \*\*\* Permit Shield in Effect. \*\*\*



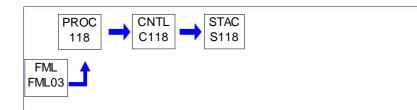


10-00027

Source ID: 118 Source Name: HYDROTREATER FLARE

Source Capacity/Throughput: 90.000 MCF/HR Refinery Gas

Conditions for this source occur in the following groups: 4 - FLARES



### I. RESTRICTIONS.

# Operation Hours Restriction(s).

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The annual capacity factor of the flare shall not exceed 5 percent (33 million Btu/hr) based on a consecutive 12-month period.

[Authority for this condition is also derived from 25 Pa. Code §129.93]

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall install, operate, and maintain the flare in accordance with 40 CFR § 60.18, pertaining to General Control Device Requirements, which the Department has determined to the Best Available Technology (BAT).

[From condition #6 of plan approval 10-312-014 issued August 13, 1996.]



# 10-00027



# **SECTION D.** Source Level Requirements

# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

\*\*\* Permit Shield in Effect. \*\*\*





# CALUMET KARNS CITY REF LLC/KARNS CITY

#### SECTION D. **Source Level Requirements**

10-00027

Source ID: 119 Source Name: NAPHTHA UNIT FLARE

> Source Capacity/Throughput: 2.200 MCF/HR Refinery Gas

Conditions for this source occur in the following groups: 4 - FLARES



### RESTRICTIONS.

# Operation Hours Restriction(s).

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The annual capacity factor of the flare shall not exceed 5 percent (15 million Btu/hr) based on a consecutive 12-month period.

[Authority for this condition is also derived from 25 Pa. Code §129.93]

### **TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### ADDITIONAL REQUIREMENTS. VII.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).





\*\*\* Permit Shield in Effect. \*\*\*





# CALUMET KARNS CITY REF LLC/KARNS CITY

#### SECTION D. **Source Level Requirements**

Source ID: 120 Source Name: FACILITY ROADS

> Source Capacity/Throughput: 1.000 Miles/HR TRUCKS DRIVEN



10-00027

### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## **WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*

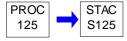




#### SECTION D. **Source Level Requirements**

Source ID: 125 Source Name: LABORATORY BUILDING

> Source Capacity/Throughput: 1.000 Gal/HR VOC CONTAINING MATERIALS



### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*





# **SECTION D.** Source Level Requirements

Source ID: 130 Source Name: GEL MIXER FOR HYDROCARBON GELS WITH LOWER FLASH POINT

Source Capacity/Throughput: 1.000 Gal/HR HYDROCARBON GELS



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*



Group Name: 1 - BOILERS 2 & 3

Group Description: State & federal requirements for Boilers 2 & 3

Sources included in this group

ID	Name					
040	40 #3 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR					
041	#2 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR					

### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §123.11]

### **Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of 0.287 pounds per million Btu of heat input, as determined by the following:

 $A = 3.6E^{(-0.56)}$  where

A = Allowable emissions in pounds per million BTUs of heat input;

E = Heat input to the combustion unit. [91 million Btu/hr for boilers 2 & 3]

 $3.6*[91^{-0.56}] = 0.287$ 

# # 002 [25 Pa. Code §123.22]

### **Combustion units**

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

## # 003 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

(a) When firing natural gas the emissions shall not exceed the following:

(1) PM 0.68 lbs/hr (2) PM-10 0.68 lbs/hr (3) NOx 4.55 lbs/hr (4) SO2 0.06 lbs/hr (5) CO 8.19 lbs/hr (6) VOC 0.50 lbs/hr

(b) The annual emission limits for the boiler are based on a 12 month consecutive period and shall not exceed the following:

(1) PM 3 tpy (2) PM-10 3 tpy (3) NOx 20 tpy (4) SO2 0.26 tpy (5) CO 35.9 tpy (6) VOC 2.2 tpy

[From Conditions 9 and 13 of Plan Approval 10-027D for Boiler #2 (Source 041); and from Section D, Source 040, Conditions #001 and #004 of Plan Approval 10-027E for Boiler #3.]

# # 004 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

- (a) The facility will limit its potential to emit for Hazardous Air Pollutants (HAPS) to less than 10 tons per year of any individual HAP and less than 25 tons per year of all combined HAPS.
- (b) This will be accomplished by permanently shutting down both coal fired boilers prior to the date three years after publication in the Federal Register of the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, signed on February 29, 2004, which will exempt the facility from this NESHAP. The facility status will then be minor





for HAPS.

10-00027

This requirement was met with the 2004-2005 shutdowns of the coal-fired Boilers #5 and #6.]

[This condition is derived from Plan Approval 10-027D, Condition 33 for Boiler #2 (Source 041); and from Section D, Source 040, Condition #005 of Plan Approval 10-027E for Boiler #3.]

# Fuel Restriction(s).

#### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee may only use natural gas as fuel in boilers #2 and #3 (Sources 040 and 041).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

### [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

Penreco shall maintain a record of all scheduled preventative maintenance inspections of the source. These records shall at a minimum contain the following:

- (1) dates of the inspections,
- (2) any problems or defects,
- (3) the actions taken to correct the problem or defects,
- (4) and any routine maintenance performed.

[From condition #30 of Plan Approval 10-027D for Boiler #2 (Source 041); and from Section D, Source 040, Condition #021 of Plan Approval 10-027E for Boiler #3.]

#### # 007 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

All records required under 40 CFR Part 60 Subpart Dc shall be maintained by the owner or operator of the affected facility for a period of 5 years following the date of such record.

[This operating permit condition assures compliance wih 40 CFR §60.48c(i).]

# [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c] Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.

- (a) [This is a one-time requirement for notification of startup which no longer applicable because it was already completed during the plan approval process.]
- (b) (f) [Not applicable.]
- (g) (1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
- (2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record





and maintain records of the amount of each fuel combusted during each calendar month.

- (3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- (h) [Not applicable.]
- (i) [Paragraph (i) of the regulation is streamlined out of the permit in favor of a 25 Pa. Code § 127.441 condition requiring records to be maintained for 5 years.]
- (j) [Not applicable.]

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

### V. REPORTING REQUIREMENTS.

### # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4] Subpart A - General Provisions Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices. [Non-Pennsylvania Regions omitted from this permit section.]

Section Chief U.S. Environmental Protection Agency Region III Enforcement and Compliance Assurance Division Air Section (3ED21) 1650 Arch Street Philadelphia, PA 19103-2029

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

Bureau of Air Quality Department of Environmental Protection 230 Chestnut Street Meadville, PA 16335

(c) – (e) [Paragraphs (c) through (e) of §60.4 are not applicable.]

[40 FR 18169, Apr. 25, 1975]

## VI. WORK PRACTICE REQUIREMENTS.

#### # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility shall install Low NOx Burners and use Flue Gas Recirculation to reduce NOx emissions and satisfy the Best Available Technology (BAT) requirement of 25 Pa. Code §127.12 (5).





[From condition #7 of Plan Approval 10-027D for Boiler #2 (Source 041); and from Section D, Source 040, Condition #031 of Plan Approval 10-027E for Boiler #3.]

#### # 011 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

The source shall be installed, maintained, and operated in accordance with the manufacturer's specifications and with good operating practices for the control of VOC emissions and in accordance with good air pollution control practices or good engineering practices.

[This condition is derived from condition #29 of Plan Approval 10-027D for Boiler #2 (Source 041); and from Section D, Source 040, condition #030 of Plan Approval 10-027E for Boiler #3. This condition is also derived from and assures compliance with the presumptive RACT II requirement of 25 Pa. Code §129.97(d).]

## VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*







Group Name: 2 - FURNACES & PROCESS HEATERS
Group Description: State PM and SOx limits for processes

Sources included in this group

ID	Name
034	HYDROTREATER REFORMER FURNACE
035	HYDROTREATER H1X REACTOR FURNACE
036	HYDROTREATER H2 STRIPPER FURNACE
117	NAPHTHA RERUN UNIT FURNACE

### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §123.11]

### **Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the rate of 0.4 pound per million Btu of heat input.

## # 002 [25 Pa. Code §123.22]

### **Combustion units**

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in: SIP Approved SO2 Limits 40 CFR 52.2020(c)(1).]

# Fuel Restriction(s).

## # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall fuel the source with only natural gas.

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

\*\*\* Permit Shield in Effect. \*\*\*







Group Name: 3 - ALCOHOL & GASOLINE STORAGE

Group Description: State requirements for Storage and Handling of alcohol and gasoline

Sources included in this group

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	ID	ID Name					
	105 ALCOHOL STORAGE AND HANDLING						
109 GASOLINE STORAGE							

### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## VI. WORK PRACTICE REQUIREMENTS.

#### # 001 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*





## CALUMET KARNS CITY REF LLC/KARNS CITY

### SECTION E. **Source Group Restrictions.**

Group Name: 4 - FLARES

10-00027

Group Description: State PM and SOx limits and requirements for flares and RACT II requirements

Sources included in this group

	ID	Name					
1	18 HYDROTREATER FLARE						
1	19	NAPHTHA UNIT FLARE					

### RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

#### # 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall maintain a record of all preventative maintenance inspections of the flare. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

# 004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall record, monthly, sufficient data to calculate the annual capacity factor on a consecutive 12-month period.

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

### [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall perform a daily preventative maintenance inspection of the flare for proper operation.
- (b) The permittee shall operate the flare at all times that gas is vented to it.

[25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

[From 25 Pa. Code § 129.97(c). Non-applicable text from the regulation is omitted from this condition.]



# CALUMET KARNS CITY REF LLC/KARNS CITY

### SECTION E. **Source Group Restrictions.**

- (c) The owner and operator of a source specified in this subsection, which is located at a major VOC emitting facility subject to § 129.96 shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices:
  - (1) (5) [Not applicable]
  - (6) An incinerator, thermal oxidizer or catalytic oxidizer used primarily for air pollution control.
  - (7) [Not applicable]

[This condition is derived from the presumptive RACT II requirements of 25 Pa. Code § 129.97. Paragraph 129.97(c)(7) applies to flares.]

## VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

\*\*\* Permit Shield in Effect. \*\*\*





Group Name: 5 - EXEMPT ENGINES

Group Description: State requirements for emergency generators exempt from plan approval requirements

Sources included in this group

10-00027

ID	Name						
043A	EMERGENCY DIESEL FIRE WATER PUMP ENGINE (208 HP)						
043B	043B EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP)						
043C	EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE (38 HP)						
043F	EMERGENCY DIESEL BACKUP GEN FOR BOILER INSTRUMENTS (66 HP)						
043G	EMERGENCY NAT GAS GENERATOR FOR HYDROTREATER (67 HP)						
043H	EMERGENCY DIESEL BACKUP FOR WW TREATMENT ENGINE (149 HP)						

## I. RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be installed, operated, and maintained in accordance with the manufacturer's specifications and in accordance with good operating practices.

[This operating permit condition, which applies to all sources of this source-group, assures compliance with the presumptive RACT II requirement of 25 Pa. Code §129.97(c)(5) for Sources 043A, 043B, 043C, 043F.]





# VII. ADDITIONAL REQUIREMENTS.

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No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

\*\*\* Permit Shield in Effect. \*\*\*





Group Name: 6 - 63-ZZZZ, EXISTING ENGINES

Group Description: Emergency Engine & Fire Pump Requirements of 40 CFR Part 63 Subpart ZZZZ

Sources included in this group

ID	Name						
043	EMERGENCY DIESEL GENERATOR ENGINE (764 BHP)						
043A	043A EMERGENCY DIESEL FIRE WATER PUMP ENGINE (208 HP)						
043B	EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP)						
043C	EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE (38 HP)						
043F	EMERGENCY DIESEL BACKUP GEN FOR BOILER INSTRUMENTS (66 HP)						

### I. RESTRICTIONS.

# Fuel Restriction(s).

#### # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6604]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

- (a) [Not applicable.]
- (b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (c) (d) [Not applicable.]

[78 FR 6702, Jan. 30, 2013]

## **Operation Hours Restriction(s).**

#### # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirement

- (a) [Paragraph 63.6640(a) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (b) (d) [Paragraphs 63.6640(b) through (d) are not applicable to this source.]
- (e) [Paragraph 63.6640(e) is printed under REPORTING REQUIREMENTS in this section of permit.]
- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).





- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (ii)-(iii) [Paragraphs 63.6640(f)(2)(ii)-(iii) were vacated on May 11, 2015.]
  - (3) [Paragraph 63.6640(f)(3) is not applicable to this source.]
- (4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - (i) (ii) [Not applicable.]

I69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

## III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

## [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

What records must I keep?

- (b) (c) [Paragraphs 63.6655(b) and (c) are not applicable to this source.]
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

[Table 6 is printed in a separate condition under the WORK PRACTICE REQUIREMENTS in this section of the permit.]

- (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) [Not applicable.]
  - (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.
- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of



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the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in  $\S$  63.6640(f)(2)(ii) or (iii) or  $\S$  63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

- (1) [Paragraph 63.6655(f)(1) is not applicable to this source.]
- (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.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

## # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [63.10(b)(1) is printed below.]
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

*****	******	******	******	******	******	*****	*****	*****	******	*****

From 63.10(b)(1):

(b) General recordkeeping requirements. (1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 71 FR 20455, Apr. 20, 2006]

### V. REPORTING REQUIREMENTS.

### # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

- (a) [Paragraph 63.6640(a) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in 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. [Reference to Tables 1a and 1b, Tables 2a and 2b, Table 2c and references to performance testing in the regulation, which are not applicable to this source, are omitted from this paragraph.]
- (c) (d) [Paragraphs 63.6640(c) and (d) are not applicable to this source.]





(e) You must report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. [Non-applicable text in paragraph 63.6640(e) of the regulation is omitted from this paragraph.]

[Refer to regulation for Table 8 to 40 CFR Part 63 Subpart ZZZZ for General Subpart A Provisions applicable to subpart ZZZZ. Ongoing required Subpart A provisions for this source include:

- 63.6(e)(1)(i), the duty to minimize emissions as referenced in 63.6675 under the definition of 'Deviation' printed in the condition for 63.6675 under ADDITIONAL REQUIREMENTS in this source group; and
- 63.10(b)(1), the recordkeeping as referenced in 63.6660(b) printed in the condition for 63.6660 under RECORDKEEPING REQUIREMENTS in this source group.]
- (f) [Paragraph 63.6640(f) is printed under RESTRICTIONS in this section of permit.]

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

## VI. WORK PRACTICE REQUIREMENTS.

# # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 2d]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

[Category 4 applies. Non-applicable items are omitted.]

4. For each Emergency stationary CI [Compression Ignition engine] RICE (See note 2.),

you must meet the following requirement, except during periods of startup . . .

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first; (see note 1)
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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### Notes

- 1 Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.
- 2 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[75 FR page 9688, Mar. 3, 2010; 75 FR page 51595, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or





management practices as required by the following:

[Category 9 of Table 6 to Part 63 Subpart ZZZZ applies. Applicable requirements from Table 6 are included here. Non-applicable text from Table 6 is omitted.]

For each existing emergency stationary RICE located at an area source of HAP, complying with the Work or Management practices requirement, you must demonstrate continuous compliance by . . .

- i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
- ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[76 FR 12870, Mar. 9, 2011; 78 FR 6700, Jan. 30, 2013]

## # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

[References in regulation to §63.6620 and Table 4 in introductory text of §63.6603 is not applicable to this source and is omitted from this paragraph.]

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart that apply to you. [The reference in regulation to Table 2b in 63.6603(a) which is not applicable to this source is omitted from this paragraph.]

[Applicable requirements from Table 2d are printed in a separate condition in this section of the permit.]

(b) - (f) [Paragraphs 63.6603 (b) through (f) are not applicable to this source.]

 $[75 \ FR \ 9675, Mar. \ 3, 2010, as amended at 75 \ FR \ 51589, Aug. \ 20, 2010; 76 \ FR \ 12866, Mar. \ 9, 2011; 78 \ FR \ 6701, Jan. \ 30, 2013]$ 

## # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my general requirements for complying with this subpart?

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

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

# # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my monitoring, installation, operation, and maintenance requirements?

(a) - (d) [Not applicable.]

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# SECTION E. Source Group Restrictions.

- (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:
  - (1) (2) [Not applicable];
  - (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
  - (4) (10) [Not applicable.]
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or 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.
- (g) [Not applicable.]
- (h) [Non-applicable text from the regulation is omitted from this paragraph.] If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to this subpart apply.
- (i) [Non-applicable text is omitted from this paragraph.] If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 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 Table 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 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 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- (j) [Not applicable.]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6700, Jan. 30, 2013]

# # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

- (a) You must demonstrate continuous compliance with each requirement in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart. [Text in the regulation 63.6640(a) which is not applicable to this source is omitted from this paragraph.] [Table 6 is printed in a separate condition in this section of permit.]
- (b) (d) [Paragraphs 63.6640(b) through (d) are not applicable to this source.]
- (e) [Paragraph 63.6640(e) is printed under REPORTING REQUIREMENTS in this section of permit.]
- (f) [Paragraph 63.6640(f) is printed under RESTRICTIONS in this section of permit.]





[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

# VII. ADDITIONAL REQUIREMENTS.

### # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6580]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

# # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) [Not applicable.]
- (c) An area source of HAP emissions is a source that is not a major source.
- (d) (f) [Not applicable.]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

## # 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
  - (1) Existing stationary RICE.
    - (i) (ii) [Not applicable.]
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
  - (iv) [Not applicable.]
  - (2) (3) [Not applicable.]
- (b) (c) [Not applicable.]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30,



2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

#### # 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

When do I have to comply with this subpart?

(a) Affected sources.

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- (1) [non-applicable text omitted] If you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
  - (2) (7) [Not applicable.]
- (b) (c) [Not applicable.]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

## [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. [Non-applicable text omitted from this paragraph.]

[Refer to regulation for Table 8 to 40 CFR Part 63 Subpart ZZZZ.]

[75 FR 9678, Mar. 3, 2010]

## [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6675]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal **Combustion Engines** 

What definitions apply to this subpart?

[Selected definitions from §63.6675 are printed below. Refer to regulation for remaining definitions applicable to 40 CFR Part 63 Subpart ZZZZ.]

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

CAA means the Clean Air Act (42 U.S.C. 7401 et seg., as amended by Public Law 101-549, 104 Stat. 2399).

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.



(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (iii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the

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# **SECTION E.** Source Group Restrictions.

emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C3H8.

Responsible official means responsible official as defined in 40 CFR 70.2.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Subpart means 40 CFR part 63, subpart ZZZZ.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

\*\*\* Permit Shield in Effect. \*\*\*





Group Name: 7 - 60-IIII, NEW DIESEL ENGINES

Group Description: Emergency Diesel Engine requirements of 40 CFR Part 60 Subpart IIII

Sources included in this group

Name

043H EMERGENCY DIESEL BACKUP FOR WW TREATMENT ENGINE (149 HP)

### RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufa-

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
  - (1) [Not applicable.]
- (2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

[Emission Restrictions from Table 1 of 40 CFR §89.112 apply and opacity restrictions from 40 CFR §89.113 apply. These

restrictions are as follows.]
(b) - (h) [Not applicable.]
[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011; 81 FR 44219, July 7, 2016]
***************************************
§ 89.112 Oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter exhaust emission standards.
(a) Exhaust emission from nonroad engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards contained in [40 CFR § 89.112] Table 1, as follows:
For Source 104, applicable category in Table 1 of § 89.112 is 75<=KW<130 Tier 3 and restrictions are: 4.0 g/kW-hr NMHC + NOx; 5.0 g/kW-hr CO; 0.3 g/kW-hr PM.
[Non-applicable categories of Table 1 and non-applicable paragraphs of § 89.112 are omitted from this permit.]
[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57000, Oct. 23, 1998; 69 FR 39212, June 29, 2004; 70 FR 40444, July 13, 2005]
***************************************

§ 89.113 Smoke emission standard.

- (a) Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed:
  - (1) 20 percent during the acceleration mode;





- (2) 15 percent during the lugging mode; and
- (3) 50 percent during the peaks in either the acceleration or lugging modes.
- (b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.
- (c) [Not applicable.]

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57003, Oct. 23, 1998]

# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal cor

- (a) Not applicable.
- (b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- (c) (f) Not applicable.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

## Fuel Restriction(s).

# # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to

- (a) [Applicable but superseded by paragraph (b).]
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

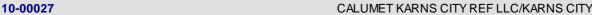
[40 CFR 80.510(b) is printed directly below.]

(c) - (e) [Non-applicable.]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

From § 80.510(b) What are the standards and marker requirements for NRLM [Non-road, Locomotive, Marine] diesel fuel and ECA marine fuel?

- (b) Beginning June 1, 2010. Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards:
  - (1) Sulfur content.
    - (i) 15 ppm maximum for NR diesel fuel.
    - (ii) 500 ppm maximum for LM diesel fuel.



- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.

[69 FR 39168, June 29, 2004, as amended at 70 FR 40895, July 15, 2005; 75 FR 22969, Apr. 30, 2010; 77 FR 61293, Oct. 9, 2012; 80 FR 9096, Feb. 19, 2015]

# **Operation Hours Restriction(s).**

#### # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) (e) [Paragraphs (a) through (e) are printed under 'WORK PRACTICE REQUIREMENTS' in this section of the permit.]
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) (iii) [Paragraphs (ii) and (iii) of the regulation were vacated by the U.S. Court of Apeals on May 1, 2015. Refer to April 15, 2016, EPA Guidance document on Vacatur of RICE NESHAP and NSPS Provisions for Emergency Engines.]
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - (i) [Not applicable.]
  - (ii) [Reserved]
- (g) [Paragraph (g) is printed under 'WORK PRACTICE REQUIREMENTS' in this section of the permit.]
- (h) [Not applicable]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]





### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### III. MONITORING REQUIREMENTS.

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- (b) [Not applicable.]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

## IV. RECORDKEEPING REQUIREMENTS.

# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) [Not applicable.]
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) (e) [Not applicable.]

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines How long must I meet the emission standards if I am an owner or operator of a stationary Cl internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:



- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
  - (2) Change only those emission-related settings that are permitted by the manufacturer; and
  - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (b) [Not applicable.]
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.
- (d) (e) [Not applicable.]
- (f) [Paragraph (f) of the regulation is printed under 'Operation Hours Restrictions' in this section of the permit.]
- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
  - (1) [Not applicable.]
- (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
  - (3) [Not applicable.]
- (h) [Not applicable.]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

### VII. ADDITIONAL REQUIREMENTS.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

[Refer to regulation for Table 8 of 40 CFR Part 60 Subpart IIII.]

[Source: 71 FR 39172, July 11, 2006]

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4219] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.





[Selected definitions are printed below. Refer to regulation for remaining definitions.]

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4211(f).
- (3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4211(f)(2)(ii) or (iii) and §60.4211(f)(3)(i).

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7,

\*\*\* Permit Shield in Effect. \*\*\*



10-00027



# **SECTION E.** Source Group Restrictions.

Group Name: 8 - 60-JJJJ, NEW GAS ENGINES

Group Description: Emergency Natural Gas Engine requirements of 40 CFR Part 60 Subpart JJJJ

Sources included in this group

ID Name

043G EMERGENCY NAT GAS GENERATOR FOR HYDROTREATER (67 HP)

### I. RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 1]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Table 1 to Subpart JJJJ of Part 60.--

Table 1 to Subpart JJJJ of Part 60 -- NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines >= 100 hp (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines > 25 hp

For Emergency Engine and Maximum engine power of 25 < HP < 130 and Manufacture date after 1/1/2009, Emission Standards are:

NOx + HC: 10 g/hp-hr (See note c)

CO: 387 g/hp-hr

Notes:

note a [Not applicable.]

note b [Not applicable.]

note c The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NOx+HC.

note d [Not applicable.]

[76 FR 37975, June 28, 2011]

# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

- (a) (c) [Not applicable.]
- (d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. [Non applicable text from regulation is omitted from this paragraph.] [The standards of Table 1 are printed in a separate condition in this section of the permit.]
- (e) (h) [Not applicable.]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine

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

[Source: 73 FR 3591, Jan. 18, 2008]





## **Operation Hours Restriction(s).**

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) (c) [Paragraphs (a) through (c) are printed under RECORDKEEPING in this section of permit.]
- (d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
  - (ii) [Not applicable.]
- (iii) [This paragraph of the regulation was vacated on May 1, 2015. Reference April 15, 2016, EPA memorandum on 'Guidance on Vacatur of RICE NESHAP and NSPS Provisions for Emergency Engines'.]
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or nonemergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - (i) [Not applicable.]
  - (ii) [Reserved]
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.
- (f) [Paragraph (f) is printed under WORK PRACTICES in this section of permit.]
- (g) (i) [Paragraphs 60.4243(g) through (i) are not applicable to this source.]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]





### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.
- (1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts Athrough D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.
- (2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.
- (i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.
- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.
- (iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
  - [Paragraph 60.4243(b)(2) is not applicable to this source.]
- (c) [Paragraph 60.4243(c) is not applicable to this source.]



- (d) (e) [Paragraphs (d) and (e) are printed under RESTRICTIONS in this section of permit.]
- (f) [Paragraph (f) is printed under WORK PRACTICES in this section of permit.]
- (g) (i) [Paragraphs 60.4243(g) through (i) are not applicable to this source.]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
  - (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (2) Maintenance conducted on the engine.
- (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [Non-applicable text is omitted from this paragraph.]
- (c) (e) [Paragraphs (c) through (e) of the regulation are not applicable to this source.]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### VI. WORK PRACTICE REQUIREMENTS.

# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4237]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

- (a) (b) Not applicable.
- (c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

[Source: 73 FR 3591, Jan. 18, 2008]





# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) (c) [Paragraphs (a) through (c) are printed under RECORDKEEPING in this section of permit.]
- (d) (e) [Paragraphs (d) and (e) are printed under RESTRICTIONS in this section of permit.]
- (f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).
- (g) (i) [Paragraphs 60.4243(g) through (i) are not applicable to this source.]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

### VII. ADDITIONAL REQUIREMENTS.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in § §60.1 through 60.19 apply to you. [Refer to regulation for Table 3 of 40 CFR Part 60 Subpart JJJJ.]

[Source: 73 FR 3591, Jan. 18, 2008]

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What definitions apply to this subpart?

[Selected definitions are printed below. Refer to regulation for remaining definitions for 40 CFR Part 60 Subpart JJJJ.]

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

- (i) 1,000 hours of operation.
- (ii) Your recommended overhaul interval.
- (iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part



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1048, or 40 CFR part 1054, as appropriate.

Subpart means 40 CFR part 60, subpart JJJJ.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]

\*\*\* Permit Shield in Effect. \*\*\*







# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.







Source Id	Source Description
031	#1 BOILER, GAS/OIL, 66 MILLION BTU/HR

<b>Emission Limit</b>			Pollutant
0.100	Lbs/MMBTU	burning natural gas; from RACT permit OP 10-027	NOX
0.140	Lbs/MMBTU	burning distillate; from RACT permit OP 10- 027	NOX
4.000	Lbs/MMBTU	from 25 Pa Code 123.22	SOX
0.344	Lbs/MMBTU	25 Pa. Code 123.11	TSP

# 034 HYDROTREATER REFORMER FURNACE

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	over any 1-hour period; 25 Pa. Code 123.22	SOX
0.400	Lbs/MMBTU	25 Pa. Code 123.11	TSP

# 035 HYDROTREATER H1X REACTOR FURNACE

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	over any 1-hour period; 25 Pa. Code 123.22	SOX
0.400	Lbs/MMBTU	25 Pa. Code 123.11	TSP

# 036 HYDROTREATER H2 STRIPPER FURNACE

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	over any 1-hour period; 25 Pa. Code 123.22	SOX
0.400	Lbs/MMBTU	25 Pa. Code 123.11	TSP

# 040 #3 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR

<b>Emission Limit</b>			Pollutant
8.190	Lbs/Hr	Plan approvals 10-027D and 10-027E	CO
35.900	Tons/Yr	Plan approvals 10-027D and 10-027E	CO
4.550	Lbs/Hr	Plan approvals 10-027D and 10-027E	NOX
20.000	Tons/Yr	Plan approvals 10-027D and 10-027E	NOX
0.680	Lbs/Hr	Plan approvals 10-027D and 10-027E	PM10_FILT
3.000	Tons/Yr	Plan approvals 10-027D and 10-027E	PM10_FILT
0.060	Lbs/Hr	Plan approvals 10-027D and 10-027E	SOX
0.260	Tons/Yr	Plan approvals 10-027D and 10-027E	SOX
4.000	Lbs/MMBTU	25 Pa. Code 123.22	SOX
0.287	Lbs/MMBTU	25 Pa. Code 123.11	TSP
0.680	Lbs/Hr	Plan approvals 10-027D and 10-027E	TSP
3.000	Tons/Yr	Plan approvals 10-027D and 10-027E	TSP
0.500	Lbs/Hr	Plan approvals 10-027D and 10-027E	VOC
2.200	Tons/Yr	Plan approvals 10-027D and 10-027E	VOC
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# 041 #2 BOILER, NEBRASKA NS-E-61, NATURAL GAS, 91 MILLION BTU/HR

<b>Emission Limit</b>			Pollutant
8.190	Lbs/Hr	Plan approvals 10-027D and 10-027E	CO
35.900	Tons/Yr	Plan approvals 10-027D and 10-027E	CO
4.550	Lbs/Hr	Plan approvals 10-027D and 10-027E	NOX
20.000	Tons/Yr	Plan approvals 10-027D and 10-027E	NOX





Source Id	Source Descriptio	r	
0.680	Lbs/Hr	Plan approvals 10-027D and 10-027E	PM10_FILT
3.000	Tons/Yr	Plan approvals 10-027D and 10-027E	PM10_FILT
0.060	Lbs/Hr	Plan approvals 10-027D and 10-027E	SOX
0.260	Tons/Yr	Plan approvals 10-027D and 10-027E	SOX
4.000	Lbs/MMBTU	25 Pa. Code 123.22	SOX
0.287	Lbs/MMBTU	25 Pa. Code 123.11	TSP
0.680	Lbs/Hr	Plan approvals 10-027D and 10-027E	TSP
3.000	Tons/Yr	Plan approvals 10-027D and 10-027E	TSP
0.500	Lbs/Hr	Plan approvals 10-027D and 10-027E	VOC
2.200	Tons/Yr	Plan approvals 10-027D and 10-027E	VOC
043	EMERGENCY DIE	SEL GENERATOR ENGINE (764 BHP)	
Emission Limit			Pollutant
2.000	GRAMS/HP-Hr	From GP-9 (Rev 3/17/2005) Cond 7.b.iii	CO
6.900	GRAMS/HP-Hr	From GP-9 (Rev 3/17/2005) Cond 7.b.ii	NOX
0.400	GRAMS/HP-Hr	From GP-9 (Rev 3/17/2005) Cond 7.b.v	TSP
043A	EMERGENCY DIE	SEL FIRE WATER PUMP ENGINE (208 HP)	
Emission Limit			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP
)43B	EMERGENCY DIE	SEL FIRE WATER PUMP ENGINE (430 HP)	

043B EMERGENCY DIESEL FIRE WATER PUMP ENGINE (430 HP)

Emission Limit			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP

043C EMERGENCY DIESEL BACKUP SCRUBBER PUMP ENGINE (38 HP)

E	mission Limit			Pollutant	
	500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX	
	0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP	

043F EMERGENCY DIESEL BACKUP GEN FOR BOILER INSTRUMENTS (66 HP)

Emission Limit			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP

043G EMERGENCY NAT GAS GENERATOR FOR HYDROTREATER (67 HP)

<b>Emission Limit</b>			Pollutant
387.000	GRAMS/HP-Hr	40 CFR Part 60 Subpart JJJJ	CO
10.000	GRAMS/HP-Hr	NOx + HC; 40 CFR Part 60 Subpart JJJJ	NOX
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP





Source Description

043H	EMERGENCY DIESEL BACKUP FOR WW TREATMENT ENGINE (149 HP)

<b>Emission Limit</b>			Pollutant
5.000	GRAMS/KW-Hr	40 CFR Part 60 Subpart IIII	CO
4.000	GRAMS/KW-Hr	40 CFR Part 60 Subpart IIII	NOx+NMHC
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP
0.300	GRAMS/KW-Hr	40 CFR Part 60 Subpart IIII	TSP

# 101 RETORT PROCESS (2 FURNACES)

<b>Emission Limit</b>			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP

# 102 OLEUM PROCESS

<b>Emission Limit</b>			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP

# 105 ALCOHOL STORAGE AND HANDLING

<b>Emission Limit</b>			Pollutant
6.200	Tons/Yr	12-month rolling total from the condenser vent per plan approval 10-027H	VOC
7.400	Lbs/Hr	From the condenser vent per plan approval 10-027H	VOC

# 117 NAPHTHA RERUN UNIT FURNACE

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	over any 1-hour period; 25 Pa. Code 123.22	SOX
0.400	Lbs/MMBTU	25 Pa. Code 123.11	TSP

# 118 HYDROTREATER FLARE

<b>Emission Limit</b>			Pollutant
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP

# 119 NAPHTHA UNIT FLARE

<b>Emission Limit</b>			Pollutant	
500.000	PPMV	dry basis; 25 Pa. Code 123.21	SOX	
0.040	gr/DRY FT3	25 Pa. Code 123.13	TSP	

## **Site Emission Restriction Summary**

Emission Limit Pollutant
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(a) This facility is located at 138 Petrolia Street, Karns City, PA 16041.

The following eFACTS ID's are assigned to this facility for this permit issuance:

Records Management System (RMS) Facility Name: Calumet Penreco

RMS ID: 46235

Master Authorization ID: 712184

APS: 637185 Client ID: 261557 Site ID: 249888

Primary Facility (PF) ID: 257250

- (b) The Capacity/Throughput numbers listed in Section A, the Site Inventory List, and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. The actual enforceable emission and operating limits for each source, with the correct number of significant digits, are listed in Sections C, D, and E of this permit. The Emission Restriction Summary in Section G of this permit is for information purposes only and is not to be used to establish enforceable limits.
- (c) Abbreviations used in this permit:

### Schematics:

FML: Fuel material location CU: Combustion Unit

PROC: Process CNTL: Control device

STAC: Stack. The stack can represent either the emission point or fugitive emissions in a permit map.

Pollutants:

CO: Carbon Monoxide NOx: Nitrogen Oxides SOx: Sulfur Oxides

TSP: **Total Suspended Particulate** VOC: Volatile Organic Compounds HAP: Hazardous Air Pollutant

Source ID: Department assigned ID number for the source Source Name: Department assigned name for the source

Capacity/Throughput: The maximum rated capacity or throughput for the source. The maximum rated capacity or throughput is not considered an enforceable limit. Enforceable limits are contained within the conditions of the permit.

Fuel/Material: The fuel/material assigned to SCC for the source

AIMS: Air Information Management System -- the DEP electronic database for permitting and emission reports

CAM: Compliance Assurance Monitoring (40 CFR Part 64)

CFR: Code of Federal Regulations

CI: Combustion Ignition

Department: Pennsylvania Department of Environmental Protection (the DEP)

eFacts: Environmental Facility Application Compliance Tracking System -- the DEP electronic database for inspection reports

ICE: Internal Combustion Engine

ICI: Industrial, Commercial, and Institutional

NESHAP: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63)

NSPS: New Source Performance Standards (40 CFR Part 60)

NWRO: Northwest Regional Office of PADEP

RACT I: The Reasonably Available Control Technology requirements of 25 Pa. Code §§ 129.93 through 129.95 promulgated on January 14, 1994, for control of NOx and VOC.

RACT II: The Reasonably Available Control Technology requirements of 25 Pa. Code §§ 129.96 through 129.100 promulgated on April 23, 2016 for control of NOx and VOC.

RFD: Request for Determination of Changes of Minor Significance & Exemption from plan approval.

RICE: Reciprocating Internal Combustion Engine SCC: Source Classification Code as defined by EPA

SI: Spark Ignition

Source: An air contamination source (25 Pa. Code § 121.1).





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WWTP: Wastewater Treatment Plant

(d) All reports, submittals, and other communications required by this permit shall be submitted to the following office.

Bureau of Air Quality Department of Environmental Protection 230 Chestnut Street Meadville, PA 16335 814-332-6940 (phone) 814-332-6121 (fax) Office Hours 8 a.m. - 4 p.m. 800-541-2050 (after hours)

Spills and other emergencies should be reported immediately to DEP by telephone at 800-541-2050.

- (e) The facility, as currently permitted, does not meet the definition of "Petroleum Refinery" as defined in 25 Pa. Code 121.1.
- (f) For purposes of this permit, "in liquid service" does not include components which carry liquid streams which have a vapor pressure of less than 0.04 psi @ 68F (0.3 kilopascals @ 20C).
- (g) Conditions #023(a) and #025(a) set forth in Section B of this permit should be interpreted as written in 25 Pa. Code §127.463(e).
- (h) For the purpose of this permit, Section C, Site Level Requirements, Condition #009(b) applies only to pipes or tanks that are part of the LDAR program. Section C condition #009 was incorporated into plan approval 10-027H for the RACT II approval and is now a 25 Pa. Code §127.12b requirement; it was previously a §127.441 requirement.
- (i) Based on applicability criteria, the following standards do not apply to this facility at time of permit issuance:
  - (1) 40 CFR 60.100 et seq., Subpart J: Standards of Performance for Petroleum Refineries
  - (2) 40 CFR 60.590 et seg., Subpart GGG: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
- (3) 40 CFR 60.690 et seq., Subpart QQQ: Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems
  - (4) 40 CFR 61.340 et seq., Subpart FF: National Emission Standards for Benzene Waste Operations
- (5) 40 CFR 63.640 et seq., Subpart CCC: National Emission Standards for Hazardous Air Pollutants From Petroleum
- (6) 40 CFR 63.100 et seq., Subparts F, G & H: National Emission Standards for Organic Hazardous Air Pollutants From Synthetic Organic Chemical Manufacturing Industry
- (7) 40 C.F.R. §63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (OLD)
- (8) 40 C.F.R. §63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
  - (9) 40 C.F.R. §63 Subpart GGGGG National Emission Standards for Hazardous Air Pollutants: Site Remediation.
- (j) For purposes of this permit, Source 102 (Oleum Process) consists of the following:
  - (1) S Plant
  - (2) Treating Plant
  - (3) Tanks
    - (A) Oleum Tank 325 (45,70 gallons)
    - (B) 4L Agitator (21,625 gallons)
    - (C) 9L Agitator (21,878 gallons)
    - (D) #5 Acid Tank (16,041 gallons)
    - (E) #6 Acid Tank (9,558 gallons)
    - (F) #7 Acid Tank (13,528 gallons)
    - (G) #8 Acid Tank (13,500 gallons)
    - (H) #10 Acid Tank (9,550 gallons)
    - (I) Truck Loading Rack from acid sludge
- (k) For the purposes of this permit, Source 118 (Hydrotreater Flare) consists of the following from the Hydrotreater:



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- (1) Vents off sour water stripper
- (2) Vents off hydrogen sulfide removal unit
- (3) Vents off hot well tank
- (4) Vents off hydrotreater separators
- (5) Relief valves
- (I) For purposes of this permit, Source 119 (Naphtha Flare) consists of the following:
  - (1) Vents off the Naphtha Rerun Unit
  - (2) Relief Valves
- (m) Sources are further described as follows.
- (1) Source 043 located in the boiler house fueled with diesel rated at 764 HP. The CAT Diesel is used as a main back-up power generator. The engine for this generator was approved with the May 31, 2005, issuance of BAQ-GPA/GP9 General Plan Approval.
- (2) Source 043A located in the lower fire house fueled with diesel rated at 208 HP. The unit is used in emergencies to power a fire water pump.
- (3) Source 043B located in the upper fire house fueled with diesel rated at 430 HP. The unit is used in emergencies to power a fire water pump.
- (4) Source 043C located in the vicinity of Source 169 Scrubber fueled with diesel rated at 38 HP. The unit is used to power a back-up pump to maintain scrubbing capability during a power outage.
- (5) Source 043F located in the boiler house fueled with diesel rated at 66 HP. The unit is used to power a back-up generator to supply instrument power during an outage.
- (6) Source 043G located in the vicinity of the hydrotreater fueled with natural gas rated at 82 HP. The unit is used to power a back-up generator for the hydrotreater. This source was RFD approved on Feb. 20, 2019, (RFD # 7464) and replaced the generator of Source 043E.
- (7) Source 043H located in the Waste Water Treatment Plant fueled with diesel rated at 119 HP. The unit is used to power a back-up pump to maintain the ability to treat waste water. This source was RFD approved on Feb. 21, 2020, (RFD # 8238) and installed in Feb. 2020 to replace the generator of Source 043D.
  - (8) Source 120, Facility Roads, is assigned a source ID for the purpose of reporting annual emissions inventory.
- (9) Source 125, the Laboratory Building Activities, is not subject to permitting requirements and is assigned a source ID for the purpose of reporting annual emissions inventory.
- (n) The following sources have minor emissions and no applicable emission, testing, monitoring, recordkeeping or reporting requirements other than the requirement in 25 PA Code 129.51(d) and 40 CFR 60.110 et seq., Subparts K, Ka & Kb: Standards of Performance for Storage Vessels for Petroleum Liquids to maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements:
  - (1) Sulfonate Storage (1.43 mmgal/yr) (~6,000 50,000 gallon tanks), AIMS ID 110;
  - (2) White Oil Storage (32 mmgal/yr) (~10,000 430,000 gallon tanks), AIMS ID 111;
  - (3) Petrolatum Storage (15.1 mmgal/yr) (~8,000 430,000 gallon tanks), AIMS ID 111, 112;
  - (4) Diesel Storage (200,000 gal/yr) (~15,000 gallon tank), AIMS ID 113;
- (5) Kerosene Distillate Storage (36.8 mmgal/yr) (~90,000 850,000 gallon tanks) installed in Jan. 1970 (vapor pressue < 1.5 psia), AIMS ID 115;
  - (6) Filter house Mix Tanks (10.8 mmgal/yr) (~8,000 gallon tank), AIMS ID 123;
  - (7) Naphtha Storage and Handling (~12,000 340,000 gallon tanks), constructed in 1950, AIMS ID 104.
- (o) The following sources have minor emissions and no applicable emission, testing, monitoring, recordkeeping or reporting requirements:
  - (1) Fly ash loading (7,658 tpy), AIMS ID 124;
  - (2) Laboratory Building (Physical and Chemical testing), AIMS ID 125;
  - (3) Cooling Towers (3), constructed in 1978 and 1995, AIMS ID 126;
  - (4) Product Loading (10,900 gal/hr), AIMS ID 108;
  - (5) Facility roads, AIMS ID 120;
  - (6) Canning plant activities;
  - (7) Hot Box in Canning plant used to melt petrolatum type products;
  - (8) Parts washer (3 Units) with less than 5% VOC;
  - (9) Gasoline Storage Tank (1,659 gallons), AIMS ID 109W;
  - (10) Hot Box near the KDU rail spur used to melt petrolatum type product;



- (11) Two diesel engine powered air compressors and fuel tanks used for various maintenance activities and which are not considered stationary sources (69 HP each for 50 hours/year each);
- (12) Diesel pump engine and fuel tank used for various maintenance activities and is not considered a stationary source (85 HP for 24 hours/year).
- (p) This Operating Permit No. TV 10-00027 was originally issued on May 4, 2000, effective on June 1, 2000, and expires on April 30, 2005. Revision No. 1, issued on March 21, 2002, was an administrative amendment to incorporate the conditions from plan approval 10-027A for the replacement of the #7 spent sulfuric acid storage tank. This Operating Permit No. TV 10-00027 was originally issued on May 4, 2000, effective on June 1, 2000, and expires on April 30, 2005. Revision No. 2, issued on July 18, 2003, was an administrative amendment to incorporate the conditions from plan approval 10-027B for the replacement of the 9L Agitator, added to source 102, Oleum Process.
- (q) This Operating Permit No. TV-10-00027 was renewed on June 13, 2005, effective immediately and expires on May 31, 2010. Revision No. 3, issued on February 08, 2006, was for an administrative amendment to incorporate the conditions from plan approval 10-027F for the replacement of acid tank #8. The capacity of this new tank is 13,500 gallons. This tank is under source 102
- (r) The Operating Permit was administratively amended on August 31, 2007 to include the conditions of plan approval 10-027E.
- (s) The Operating permit was administratively amended on February 14, 2008 to change the name of the facility and permit contact.
- (t) The Permit was renewed on July 29, 2010 with an expiration date of June 30, 2015.
- (u) This permit was renewed on June 10, 2015.
- (v) This permit was administratively amended on March 9, 2017 to incorporate the name change from Calumet Penreco, LLC to Clumet Karns City Refining, LLC. The tax ID did not change. The amendment also changed the responsible official from Lee Achesinski to William Cramer- Plant Manager.
- (w) This Title V operating permit renewal, effective March 2, 2021, is issued on March 2, 2021. In accordance with EPA guidance regarding the Homer City decision, this renewal includes the conditions of plan approval 10-027H applicable to Sources 101, 105, & 106.
- (x) This Title V operating permit was administratively amended on February 9, 2022 to incorporate the requirements of Plan Approval 10-027H.

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\*\*\*\*\* End of Report \*\*\*\*\*