



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: November 6, 2013 Effective Date: May 9, 2017
Revision Date: May 9, 2017 Expiration Date: November 6, 2018
Revision Type: Modification, Significant

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: 46-00035

Federal Tax Id - Plant Code: 23-1099050-1

Owner Information

Name: GLAXOSMITHKLINE LLC
Mailing Address: 709 SWEDELAND RD
KING OF PRUSSIA, PA 19406-2711

Plant Information

Plant: GLAXO SMITHKLINE/UPPER MERION
Location: 46 Montgomery County 46955 Upper Merion Township
SIC Code: 2834 Manufacturing - Pharmaceutical Preparations

Responsible Official

Name: JOHN DACOSTA
Title: DIR, CONTRACT OPS UM/UP
Phone: (484) 880 - 8525

Permit Contact Person

Name: ELIZABETH BURDICK
Title: ENVIRONMENT ADVISOR
Phone: (215) 439 - 4948

[Signature] _____
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

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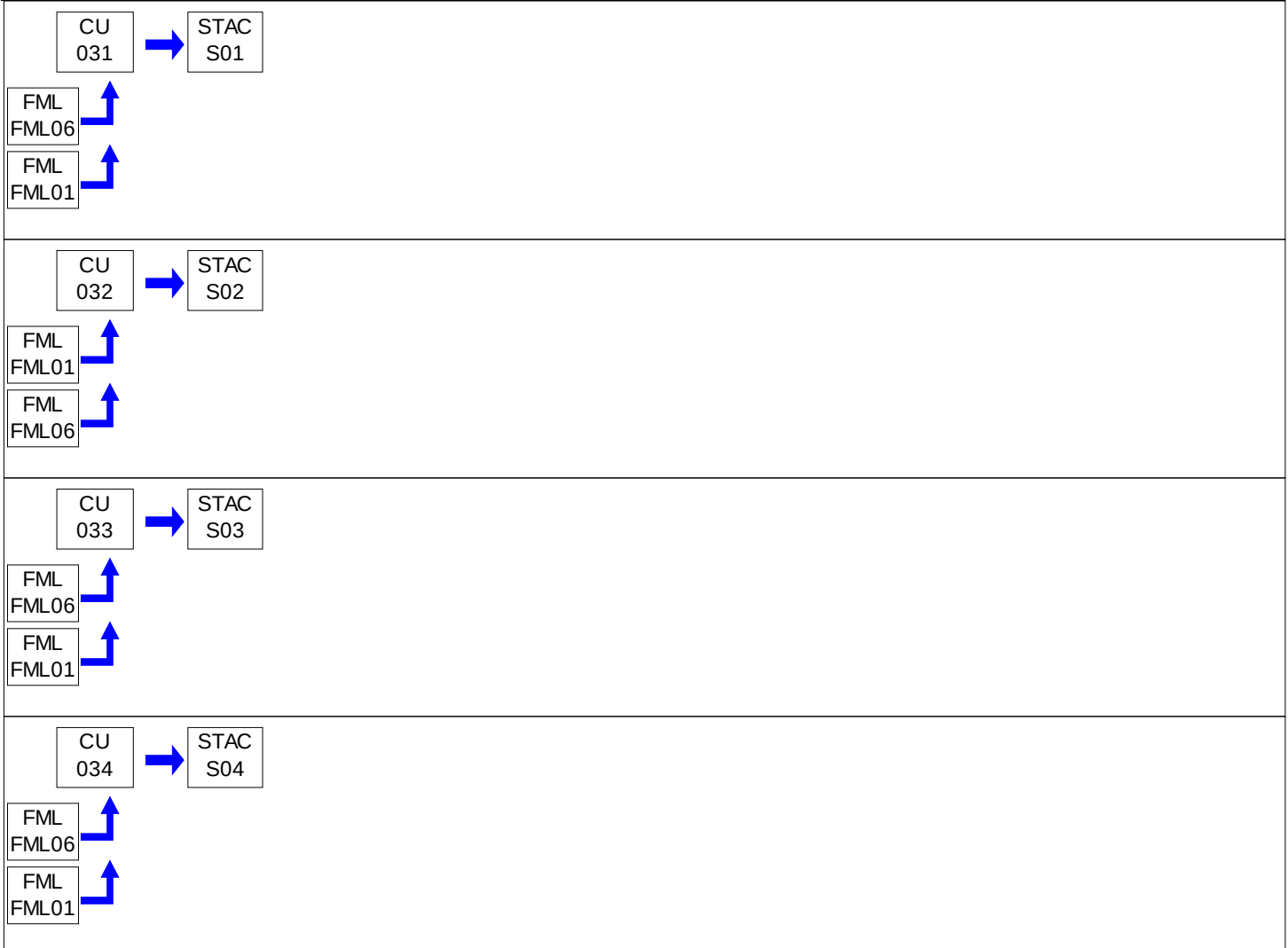
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput		Fuel/Material
031	CLEAVER BROOKS 1 (BLDG 20)	25.000	MMBTU/HR	
		163.000	Gal/HR	#6 Oil
		25,000.000	CF/HR	Natural Gas
032	CLEAVER BROOKS 2 (BLDG 20)	49.000	MMBTU/HR	
		320.000	Gal/HR	#6 Oil
		49,000.000	CF/HR	Natural Gas
033	CLEAVER BROOKS 3 (BLDG 20)	49.000	MMBTU/HR	
		320.000	Gal/HR	#6 Oil
		49,000.000	CF/HR	Natural Gas
034	CLEAVER BROOKS 4 (BLDG 20)	25.000	MMBTU/HR	
		163.000	Gal/HR	#6 Oil
		25,000.000	CF/HR	Natural Gas
037	CLEAVER BROOKS 9 (BLDG 3)	34.500	MMBTU/HR	
		225.000	Gal/HR	#6 Oil
		34,482.000	CF/HR	Natural Gas
038	CLEAVER BROOKS 10 (BLDG 3)	34.500	MMBTU/HR	
		225.000	Gal/HR	#6 Oil
		34,482.000	CF/HR	Natural Gas
039	CLEAVER BROOKS 11 (BLDG 3)	34.500	MMBTU/HR	
		225.000	Gal/HR	#6 Oil
		34,482.000	CF/HR	Natural Gas
048	BOILER MACT FOR FUEL OIL BOILERS			
051	CLEAVER BROOKS 44 (BLDG 40)	33.500	MMBTU/HR	
		239.000	Gal/HR	#2 Oil
		33.500	MCF/HR	Natural Gas
052	CLEAVER BROOKS 45 (BLDG 40)	33.500	MMBTU/HR	
		239.000	Gal/HR	#2 Oil
		33.500	MCF/HR	Natural Gas
053	CLEAVER BROOKS 800 (BLDG 40)	32.700	MMBTU/HR	
		32.700	MCF/HR	Natural Gas
047A	#2 OIL EMERGENCY GENERATORS (13)	92.400	MMBTU/HR	
		N/A		DIESEL FUEL/ # 2 OIL
047B	(5) DETROIT DIESEL GENERATORS	555.000	Gal/HR	DIESEL / #2 OIL
106	BLDG 40 EGEN 2	53.500	Gal/HR	NON-ROAD DIESEL FUEL
107	PHARMACEUTICAL MANUFACTURING BLDG 40	N/A		
200	FUEL OIL STORAGE TANKS (3)	N/A		
C047B	OXIDATION CATALYST			
FML 03	DIESEL FUEL TANK FOR BLDG 40 EGEN 2			
FML01	NATURAL GAS			
FML02	#2 FUEL OIL			
FML06	#6 FUEL OIL			

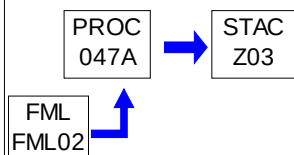
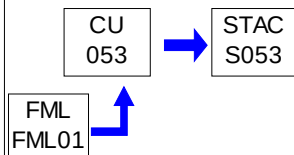
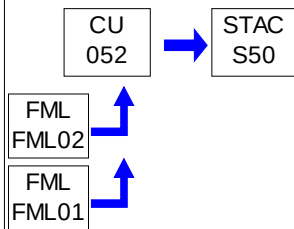
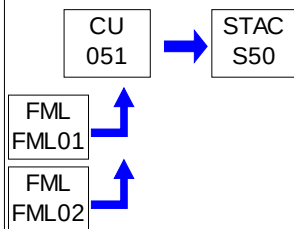
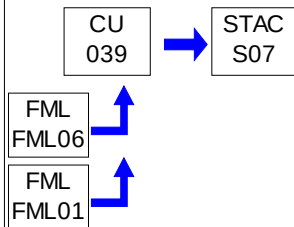
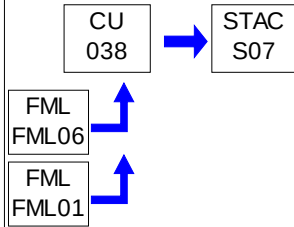
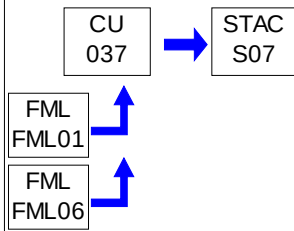
SECTION A. Site Inventory List

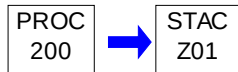
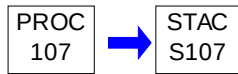
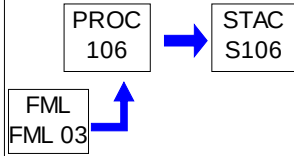
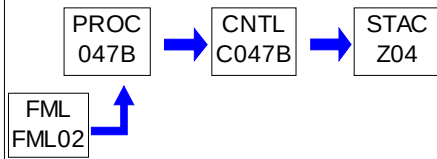
Source ID	Source Name	Capacity/Throughput	Fuel/Material
S01	CB BOILER 1 STACK		
S02	CB BOILER 2 STACK		
S03	CB BOILER 3 STACK		
S04	CB BOILER 4 STACK		
S053	CLEAVER BROOK 800 (BLDG 40) STACK		
S07	BUILDING 3 STACK		
S106	STACK BLDG 40 EGEN 2		
S107	PHARMACEUTICAL MANUFACTURING STACK		
S50	BUILDING 40 STACK		
Z01	FUEL OIL STORAGE TANKS		
Z03	NO.2 OIL EMERGENCY GENERATORS		
Z04	(5) DETROIT DIESEL EMERGENCY GENERATORS		

PERMIT MAPS



PERMIT MAPS



PERMIT MAPS

SECTION B. General Title V Requirements

#001 [25 Pa. Code § 121.1]

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]

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.

(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.

SECTION B. General Title V Requirements

(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

SECTION B. General Title V Requirements

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

SECTION B. General Title V Requirements

25 Pa. Code § 127.541. 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].

#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.

#017 [25 Pa. Code § 127.512(b)]

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).

(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).

SECTION B. General Title V Requirements

(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#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 NO_x from a single source during the term of the permit and 5 tons of NO_x 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.

SECTION B. General Title V Requirements

(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,

SECTION B. General Title V Requirements

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:

Office of Air Enforcement and Compliance Assistance (3AP20)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(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.
- (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.

SECTION B. General Title V Requirements

(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 and EPA in accordance with the submission requirements specified in condition #022 of this section.

#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)

SECTION B. General Title V Requirements

- (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.

SECTION B. General Title V Requirements

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #24 of Section B of this Title V 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.

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §121.7]

Prohibition of air pollution.

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) 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;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) the emissions are of minor significance with respect to causing air pollution; and
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [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 Condition #002(a) -- (i) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

004 [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.

005 [25 Pa. Code §123.41]

Limitations

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:

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

SECTION C. Site Level Requirements

006 [25 Pa. Code §123.42]

Exceptions

The limitations of Condition #005, of this Section, shall not apply to a visible emission in either of the following instances:

- (a) when the presence of uncombined water is the only reason for failure to meet the limitations; or
- (b) when the emission results from the sources specified in Condition #002, of this Section.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the total facility wide HAP emissions to less than the following, calculated on a 12-month rolling sum:

- (a) less than 10 tons per year for any single HAP and
- (b) less than 25 tons per year for any combination of HAP's.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee must ensure the aggregate NO_x emissions from this facility to not exceed 99.99 tons per year calculated on a 12-month rolling sum.
- (b) If the aggregate NO_x emissions from this facility exceed the applicability threshold of 100.00 tons per year then the permittee will be subject to the provisions of 25 Pa. Code §§ 129.96 - 129.100.

009 [25 Pa. Code §129.14]

Open burning operations

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

- (a) 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;
- (b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
- (c) a fire set for the prevention and control of disease or pests, when approved by the Department;
- (d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;
- (e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
- (f) a fire set solely for recreational or ceremonial purposes; or
- (g) a fire set solely for cooking food.

II. TESTING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

SECTION C. Site Level Requirements

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.**# 011 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) a device approved by the Department and maintained to provide accurate opacity measurements; or
- (b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

- (a) The permittee shall monitor the facility, once per operating day, for the following:
 - (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
 - (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
 - (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
 - (1) be investigated;
 - (2) be reported to the facility management, or individual(s) designated by the permittee;
 - (3) have appropriate corrective action taken (for emissions that originate on-site); and
 - (4) be recorded in a permanent written log.
- (c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.
- (d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall monitor and calculate the total facility wide HAP emissions monthly and on a 12-month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.**# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall monitor and record the monthly fuel usage for all Boilers and Emergency Generator Engines on a monthly basis, and on a 12-month rolling sum, to ensure the facility wide aggregate NOx emissions do not exceed 100 tons per year on a 12-month rolling sum.

SECTION C. Site Level Requirements

(b) The permittee shall monitor and record the facilitywide aggregate NO_x emissions on a monthly basis and on a 12-month rolling sum.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);
- (b) the cause of the event; and
- (c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) emissions increase of minor significance without notification to the Department.
- (b) de minimis increases with notification to the Department, via letter.
- (c) increases resulting from a Request for Determination (RFD) to the Department.
- (d) increases resulting from the issuance of a plan approval and subsequent operating permit.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep records of the total facilitywide HAP emissions monthly and on a 12-month rolling sum.
- (b) The permittee shall keep records of the total facilitywide NO_x emissions monthly and on a 12-month rolling sum.

V. REPORTING REQUIREMENTS.

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

(a) The permittee shall, within two (2) hours of discovery of any occurrence, notify the Department, at (484) 250-5920, of any malfunction of the source(s) or associated air pollution control devices listed in Section A, of this permit, which results in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in this permit, or of a regulation contained in 25 Pa. Code Article III.

(b) Malfunction(s) which occur at this facility, and pose(s) an imminent danger to public health, safety, welfare and the environment, and would violate permit conditions if the source were to continue to operate after the malfunction, shall immediately be reported to the Department by telephone at the above number.

(c) A written report shall be submitted to the Department within two (2) working days following the notification of the incident, and shall describe the following:

- (1) The malfunction(s).
- (2) The emission(s).

SECTION C. Site Level Requirements

(3) The duration.

(4) Any corrective action taken.

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511(c).]

The permittee shall submit the following:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #24 of section B of this permit. . The annual certificate of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov

(b) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

020 [25 Pa. Code §135.21]

Emission statements

The permittee shall submit by March 1, of each year, an annual emission statement for the preceding calendar year.

021 [25 Pa. Code §135.3]

Reporting

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee, who has been previously advised by the Department to submit a source report, shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all 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, including those sources listed in the Miscellaneous Section of this permit.

The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.

022 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in Condition #002, above, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

(a) use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;

(b) application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;

(c) paving and maintenance of roadways; and

(d) 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 by other means.

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

SECTION C. Site Level Requirements

The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #017(g), of Section B, of this permit.

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III, or any other applicable rule promulgated under the Clean Air Act.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6]

Subpart A--General Provisions

Compliance with standards and maintenance requirements.

Operation and maintenance requirements.

(a) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

(b) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required.

(c) Operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

VII. ADDITIONAL REQUIREMENTS.

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

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

*** Permit Shield In Effect ***

SECTION D. Source Level Requirements

Source ID: 031

Source Name: CLEAVER BROOKS 1 (BLDG 20)

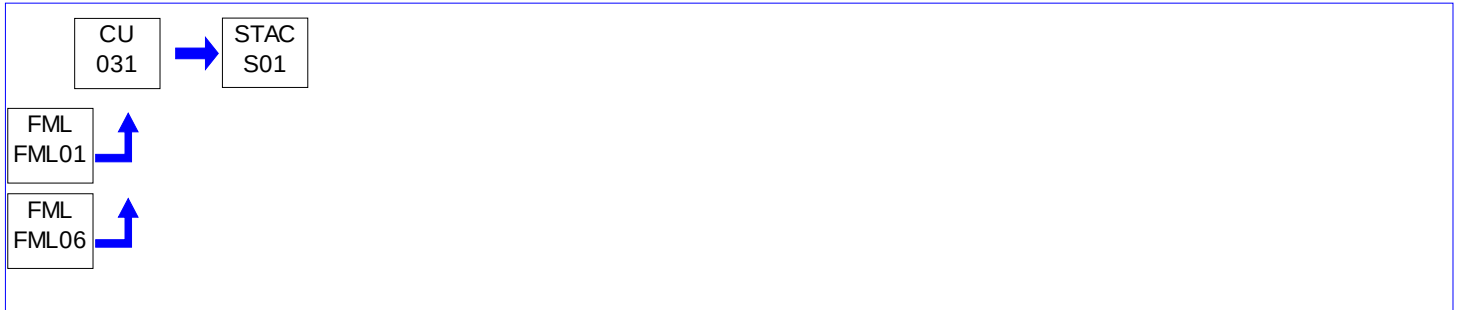
Source Capacity/Throughput: 25.000 MMBTU/HR

163.000 Gal/HR

#6 Oil

25,000.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

- i. The company shall keep a record of the date and cause of the malfunction.
- ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

SECTION D. Source Level Requirements**III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NOx emission rates, and
- (e) the final excess oxygen rate.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

009 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

- (a) a certification from the fuel supplier of the type of fuel delivered.
- (b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

SECTION D. Source Level Requirements

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).
- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa.Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

VII. ADDITIONAL REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10

**SECTION D. Source Level Requirements**

MMBTU/HR and uses fuel defined under the oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 032

Source Name: CLEAVER BROOKS 2 (BLDG 20)

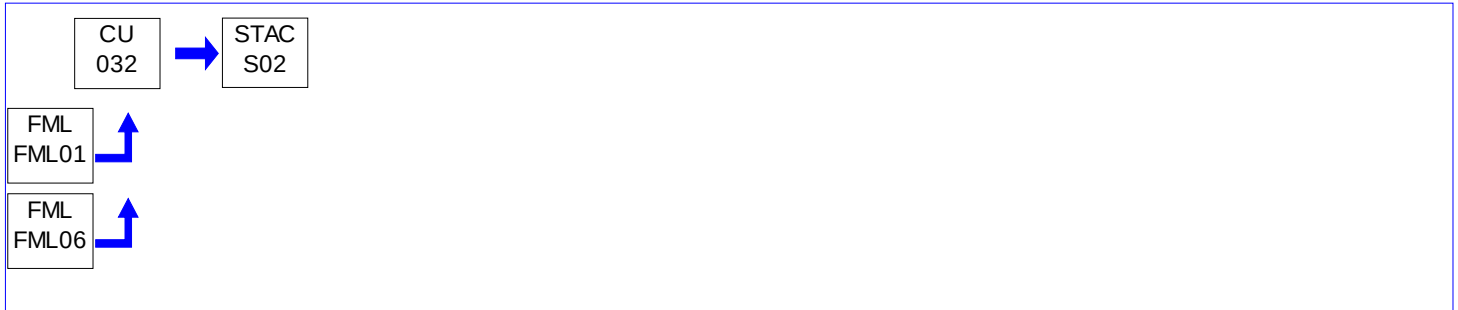
Source Capacity/Throughput: 49.000 MMBTU/HR

320.000 Gal/HR

#6 Oil

49,000.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

i. The company shall keep a record of the date and cause of the malfunction.

ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).

004 [25 Pa. Code §123.22]

Combustion units

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

(a) The flow rate of the Number 6 fuel oil shall not exceed 327 gallons per hour.

(b) The flow rate of the natural gas shall not exceed 49,000 cubic feet per hour.

(c) The annual use of Number 6 fuel oil shall not exceed 1,100,000 gallons per year.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

SECTION D. Source Level Requirements

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NO_x emission rates, and
- (e) the final excess oxygen rate.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

SECTION D. Source Level Requirements

(a) a certification from the fuel supplier of the type of fuel delivered.

(b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

(a) the hours of operation, monthly and

(b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

(a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).

(c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

SECTION D. Source Level Requirements

[Additional authority for this permit condition is also derived from 25 Pa.Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

VII. ADDITIONAL REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 033

Source Name: CLEAVER BROOKS 3 (BLDG 20)

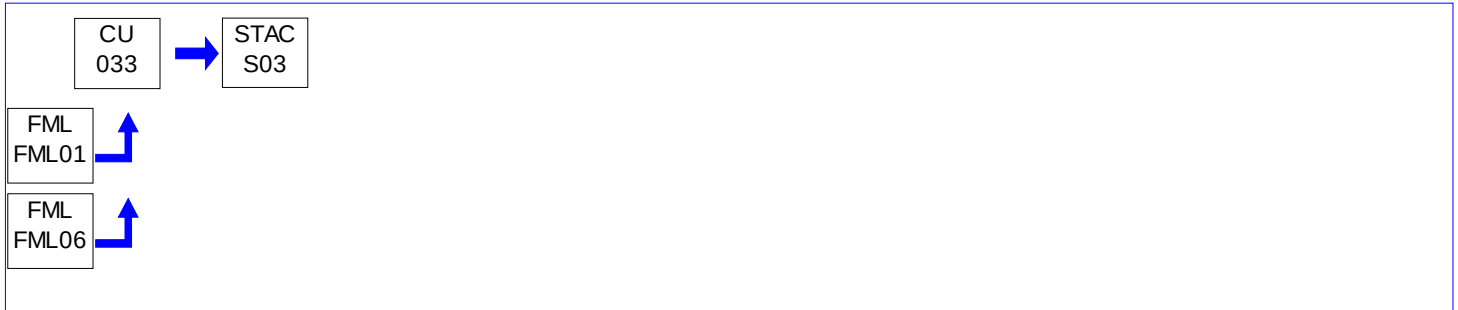
Source Capacity/Throughput: 49.000 MMBTU/HR

320.000 Gal/HR

#6 Oil

49,000.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

i. The company shall keep a record of the date and cause of the malfunction.

ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).

004 [25 Pa. Code §123.22]

Combustion units

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

(a) The flow rate of the Number 6 fuel oil shall not exceed 327 gallons per hour.

(b) The flow rate of the natural gas shall not exceed 49,000 cubic feet per hour.

(c) The annual use of Number 6 fuel oil shall not exceed 1,100,000 gallons per year.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

SECTION D. Source Level Requirements

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NO_x emission rates, and
- (e) the final excess oxygen rate.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

SECTION D. Source Level Requirements

(a) a certification from the fuel supplier of the type of fuel delivered.

(b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

(a) the hours of operation, monthly and

(b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

(a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).

(c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa.Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

VII. ADDITIONAL REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 034

Source Name: CLEAVER BROOKS 4 (BLDG 20)

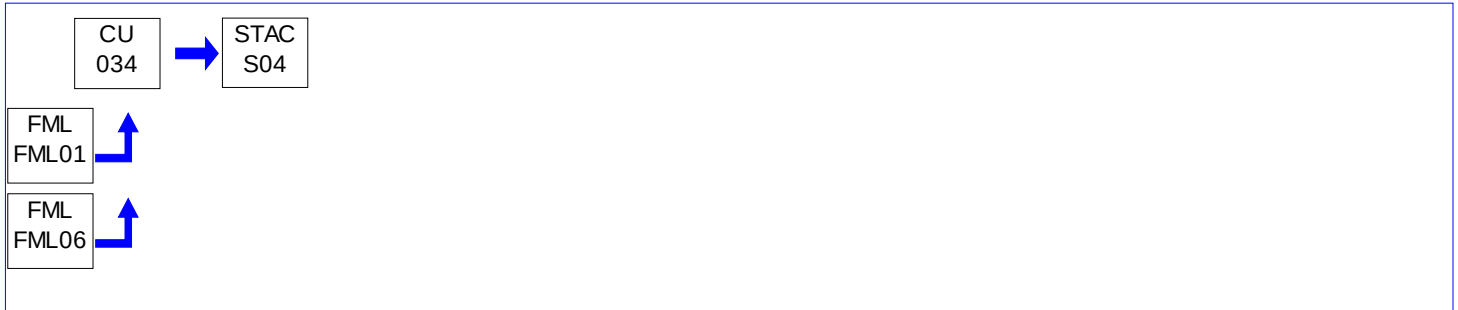
Source Capacity/Throughput: 25.000 MMBTU/HR

163.000 Gal/HR

#6 Oil

25,000.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

- i. The company shall keep a record of the date and cause of the malfunction.
- ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

SECTION D. Source Level Requirements**III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NOx emission rates, and
- (e) the final excess oxygen rate.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

009 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

- (a) a certification from the fuel supplier of the type of fuel delivered.
- (b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

SECTION D. Source Level Requirements

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).
- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa.Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

VII. ADDITIONAL REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10

**SECTION D. Source Level Requirements**

MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 037

Source Name: CLEAVER BROOKS 9 (BLDG 3)

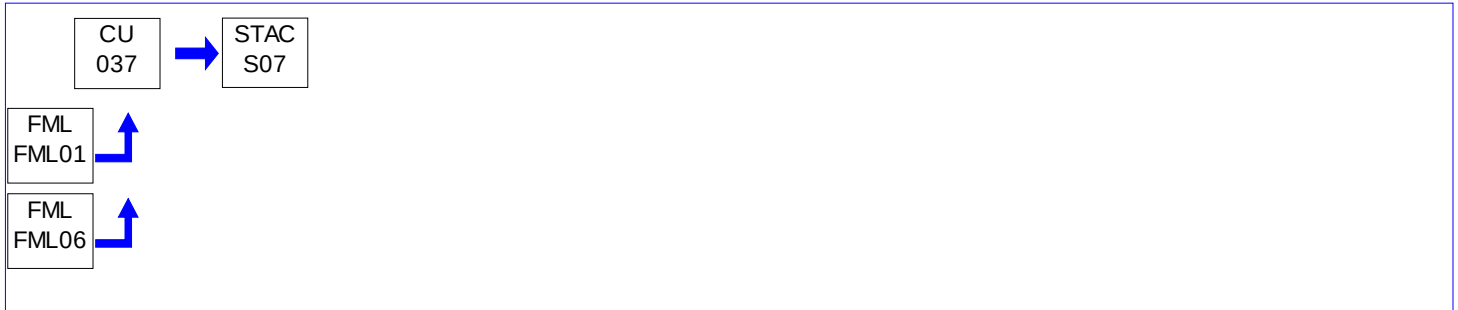
Source Capacity/Throughput: 34.500 MMBTU/HR

225.000 Gal/HR

#6 Oil

34,482.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

- i. The company shall keep a record of the date and cause of the malfunction.
- ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2).

005 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The annual use of the Number 6 fuel oil shall not exceed 1,680,000 gallons per year.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the

SECTION D. Source Level Requirements

maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NOx emission rates, and
- (e) the final excess oxygen rate.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

- (a) a certification from the fuel supplier of the type of fuel delivered.
- (b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

SECTION D. Source Level Requirements

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).
- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

SECTION D. Source Level Requirements**VII. ADDITIONAL REQUIREMENTS.**

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 038

Source Name: CLEAVER BROOKS 10 (BLDG 3)

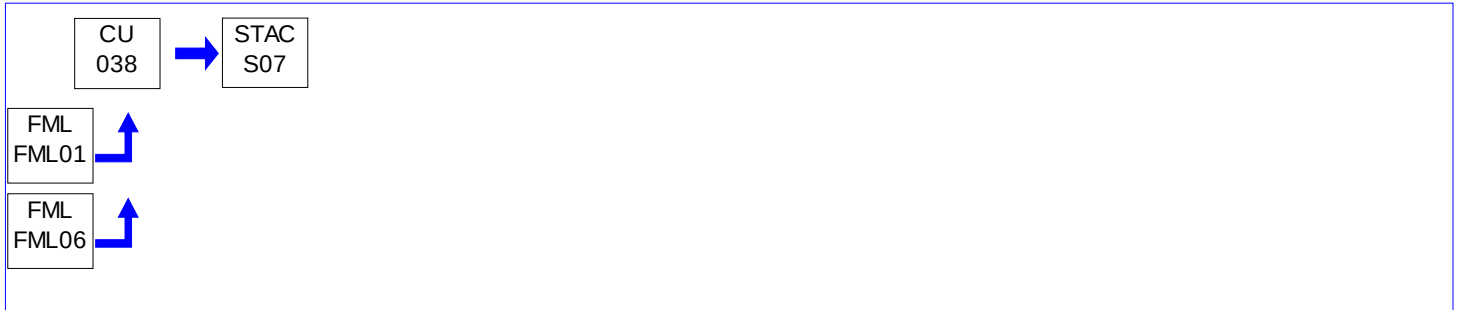
Source Capacity/Throughput: 34.500 MMBTU/HR

225.000 Gal/HR

#6 Oil

34,482.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

- i. The company shall keep a record of the date and cause of the malfunction.
- ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

005 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The annual use of No. 6 fuel oil shall not exceed 400,000 gallons per year.

(b) The annual use of natural gas shall not exceed 112 million cubic feet per year.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11)

SECTION D. Source Level Requirements

(relating to references). The viscosity shall be determined at 100 F.

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

(a) the hours of operation, monthly and

(b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

(a) the date of the tuning procedure,

(b) the name of the service company and technicians,

(c) the final operating rate or load,

(d) the final CO and NOx emission rates, and

(e) the final excess oxygen rate.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours

b. The reason for burning No. 2, 4, or 5 fuel oil, and

c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

(a) a certification from the fuel supplier of the type of fuel delivered.

SECTION D. Source Level Requirements

(b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

(a) the hours of operation, monthly and

(b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

(a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).

(c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.512(h)]

SECTION D. Source Level Requirements

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

VII. ADDITIONAL REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 039

Source Name: CLEAVER BROOKS 11 (BLDG 3)

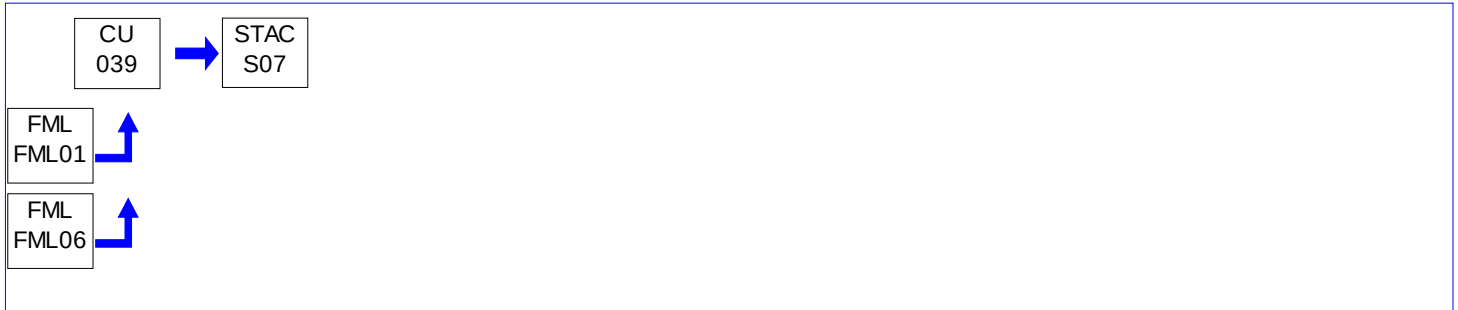
Source Capacity/Throughput: 34.500 MMBTU/HR

225.000 Gal/HR

#6 Oil

34,482.000 CF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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 any combustion unit, in the Southeast Air Basin, in excess of 1.0 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The following condition applies only to the following boilers:

- Cleaver Brooks #1 (Bldg. 20)
- Cleaver Brooks #2 (Bldg. 20)
- Cleaver Brooks #3 (Bldg. 20)
- Cleaver Brooks #4 (Bldg. 20)
- Cleaver Brooks #9 (Bldg. 3)
- Cleaver Brooks #10 (Bldg. 3)
- Cleaver Brooks #11 (Bldg. 3)

a) In the event that one of the boilers listed above experiences a malfunction such that the steam load is required to be replaced, then the company is allowed to install a rental boiler that is the same capacity, or less.

b) The rental boiler shall combust the same type(s) of fuel or a more refined fuel oil as the boiler that it is replacing.

c) The rental boiler is only authorized to operate for a maximum of six months.

d) Sufficient data shall be recorded so that compliance with [this condition] can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

- i. The company shall keep a record of the date and cause of the malfunction.
- ii. The company shall keep a record of the emissions from the rental boiler on a monthly basis.

SECTION D. Source Level Requirements

iii. The company shall keep a record of the number of days of operation of the rental boiler.

e) The company shall notify the Department, by telephone at 484-250-5920, within 24 hours of a malfunction that requires obtaining a rental boiler. The company shall submit to the Department, within five working days, a written notification that a rental boiler has been temporarily installed. In addition, the written notification shall include the rated capacity of the rental boiler.

f) The identity and capacity of the boiler that malfunctioned, the type of the fuel that the rental boiler will be combusting and the expected amount of time that the rental boiler will be on-site.

g) This rental boiler will be subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR Section 60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

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U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil, Grade No. 6, for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 0.5% by weight, pursuant to 25 Pa. Code § 123.22(e)(2).

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

005 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The annual use of No. 6 fuel oil shall not exceed 400,000 gallons per year.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100 F.

SECTION D. Source Level Requirements

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall monitor the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up for each boiler in a binder located on-site and/or in a equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NOx emission rates, and
- (e) the final excess oxygen rate.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2, 4, or 5 Fuel Oil:

- a. The date and duration of burning No. 2, 4, or 5 fuel oil, recorded in hours
- b. The reason for burning No. 2, 4, or 5 fuel oil, and
- c. The hours per calendar year that No. 2, 4, or 5 fuel oil was used for periodic testing of liquid fuels.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall maintain records of the following:

- (a) a certification from the fuel supplier of the type of fuel delivered.
- (b) a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

SECTION D. Source Level Requirements**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the following for each boiler associated with this Source ID:

- (a) the hours of operation, monthly and
- (b) the amount and type of fuel consumed monthly and on a 12 month rolling sum.

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.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up for each boiler associated with this Source ID which shall consist of the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).
- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.512(h)]

The permittee shall operate and maintain the boilers associated with this Source ID in accordance with manufacturer's specifications to maintain compliance with the sulfur oxides and particulate matter limitations.

SECTION D. Source Level Requirements**VII. ADDITIONAL REQUIREMENTS.**

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.11237]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses fuel defined under oil subcategory of Subpart JJJJJJ.

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

SECTION D. Source Level Requirements

Source ID: 048

Source Name: BOILER MACT FOR FUEL OIL BOILERS

Source Capacity/Throughput:

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.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. 63.11225(c)]

(1) The permittee must keep a copy of each notification and report that is submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.

(2) Keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 C.F.R. § 63.11214 and § 63.11223 as specified in paragraphs (2)(i) through (ii) of this condition.

(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) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.

(3) Keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(4) Keep 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.

(5) Keep records of all inspection and monitoring data required by § 63.11221 and 63.11222, and the information identified in paragraphs (i) through (vi) of this condition for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event.

(ii) Person conducting the monitoring.

(iii) Technique or method used.

(iv) Operating conditions during the activity.

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.

(vi) Maintenance or corrective action taken (if applicable).

SECTION D. Source Level 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.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition was also derived from 40 C.F.R. 63.11201(b) and 63.11237]

The permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in table 2 of 40 C.F.R. 63 satisfies the energy assessment requirement. The energy assessment must include the following:

- (1) A visual inspection of the boiler system,
- (2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,
- (3) Inventory of major systems consuming energy from affected boiler(s),
- (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
- (5) A list of major energy conservation measures,
- (6) A list of the energy savings potential of the energy conservation measures identified,
- (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. 63.11223(b)(1-7) and 63.11223(c)]

a. Boilers with an oxygen trim system that maintain an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (1) through (7) of this condition. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

b. Existing oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio shall conduct an initial tune-up as specified in paragraphs (1) through (7) of this condition, and conduct a tune-up of the boiler biennially as specified in § 63.11223. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

- (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). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
- (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). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months

SECTION D. Source Level Requirements

from the previous inspection.

(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 (6)(i) through (iii) of this condition.

(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.

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID's 031-034 and 037-039 (as listed in Section A of this permit), are subject to all applicable requirements found in 40 C.F.R. 63 Subpart JJJJJJ.

The conditions listed under this Source ID 048, Boiler MACT for fuel oil boilers, are only applicable to Source ID's 031-034 and 037-039 (as listed in Section A of this permit).

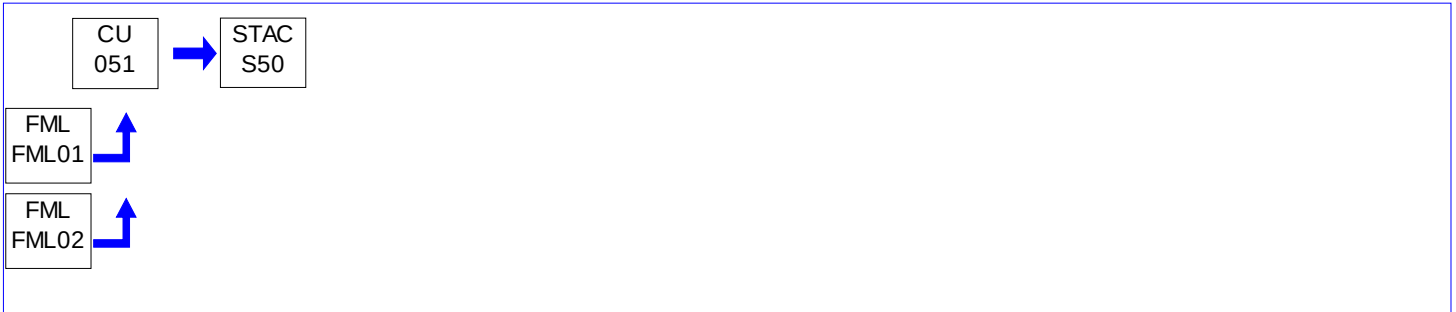
*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 051

Source Name: CLEAVER BROOKS 44 (BLDG 40)

Source Capacity/Throughput:	33.500	MMBTU/HR	
	239.000	Gal/HR	#2 Oil
	33.500	MCF/HR	Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The Nitrogen Oxides (NOx) emissions from this boiler shall not exceed in the prescribed manner:

- (a) 30 ppm corrected to 3% Oxygen content when firing natural gas,
- (b) 140 ppm corrected to 3% Oxygen content when firing Number 2 fuel oil, and
- (c) 8.2 tons per year on a twelve month rolling period.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for sulfur dioxide.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

SULFUR OXIDES EMISSIONS

- (a) The sulfur oxide emission limit for this source is 0.5 lb/million Btu, heat input, determined over a 30-day rolling average pursuant to 40 CFR 60.42c (d) and (g).
- (b) The permittee shall demonstrate compliance with this condition by using No. 2 fuel oil that contains less than 0.2 percent, by weight sulfur. This will be documented by obtaining a certification from the fuel oil supplier that the No. 2 fuel oil delivered to the facility contained less than 0.2 percent, by weight sulfur, pursuant to 40 CFR 60.42c(h).

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for particulate matter.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

Opacity Standard:

- (a) The permittee shall not cause to be discharged into the atmosphere from the boiler any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (b) The opacity standards under this condition apply at all times, except during periods of startup, shutdown, or malfunction.

SECTION D. Source Level Requirements

Fuel Restriction(s).

004 [25 Pa. Code §123.22]

Combustion units

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall use natural gas as the primary fuel for this boiler.

(b). The permittee shall only burn No. 2 fuel oil during periods of gas curtailment, gas emergencies, or periodic testing of liquid fuel.

(c). The permittee shall limit the burning of No. 2 fuel oil for periodic testing of liquid fuels to less than 48 hours during any calendar year.

[Compliance with conditions (b) and (c) above, ensures that this source is considered a gas fired boiler for the purposes of 40 C.F.R. Part 63 Subpart JJJJJJ]

Throughput Restriction(s).

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

(a) The total amount of Number 2 fuel oil fired in Boiler #44 and Boiler #45 shall not exceed 478,286 gallons in a twelve (12) month rolling period.

(b) The total amount of Natural gas fired in Boiler #44 and Boiler #45 shall not exceed 205.3 million cubic feet in a twelve month rolling period.

II. TESTING REQUIREMENTS.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44c]

**Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Compliance and performance test methods and procedures for sulfur dioxide.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR Section 60.48c(f)(1), (2), or (3), as applicable.

III. MONITORING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following:

(a) the hours of operation, monthly, and

(b) the fuel usage monthly and on a 12-month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

SECTION D. Source Level Requirements

The permittee shall keep records of the annual tune-up in a binder located on-site and/or in an equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NO_x emission rates, and
- (e) the final excess oxygen rate.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall maintain records to show compliance with all applicable requirements of 40 CFR Subpart Dc, 40 CFR 63 Subpart JJJJJ and state requirements, which shall include but not limited to:

- (a) the parameters monitored to ensure compliance with the sulfur oxides, particulate matter and nitrogen oxides limitations,
- (b) all tests conducted,
- (c) any malfunctions,
- (d) amount and type of fuel used monthly and on a 12-month rolling sum,
- (e) receipts from fuel supplier, and
- (f) hours of operations, monthly.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall keep records of the following:

- (a) A certification from the fuel supplier of the type of fuel delivered.
- (b) A certification that the fuel complies with ASTM D396-78 "Standard Specification for Fuel Oils."

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records of the following when this source burns No. 2 Fuel Oil:

- a. The date and duration of burning No. 2 fuel oil, recorded in hours
- b. The reason for burning No. 2 fuel oil, and
- c. The hours per calendar year that No. 2 fuel oil was used for periodic testing of liquid fuels.

V. REPORTING REQUIREMENTS.**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 40 CFR § 60.4]

The permittee shall submit copies of all requests, reports, application, submittals, and other communications to both EPA

SECTION D. Source Level Requirements

and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19107.

014 [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.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification shall include the following. In addition to records of fuel supplier certifications, the semi-annual report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted.

(i) The name of the oil supplier; and

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR Section 60.41c.

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

016 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The boiler shall be equipped with low NOx burners with flue gas recirculation.

017 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up consisting of the following:

(a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).

(c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

018 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

SECTION D. Source Level Requirements

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

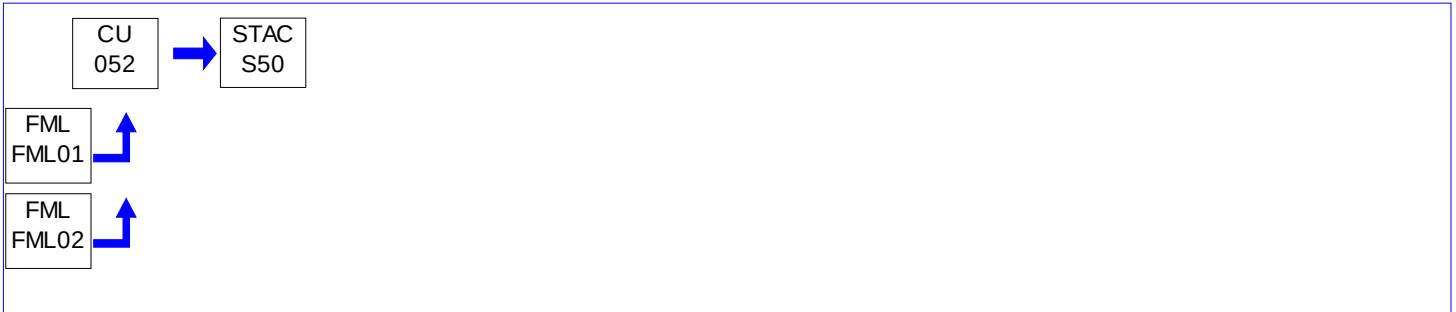
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 052

Source Name: CLEAVER BROOKS 45 (BLDG 40)

Source Capacity/Throughput:	33.500	MMBTU/HR	
	239.000	Gal/HR	#2 Oil
	33.500	MCF/HR	Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The Nitrogen Oxides (NOx) emissions from this boiler shall not exceed in the prescribed manner:

- (a) 30 ppm corrected to 3% Oxygen content when firing natural gas,
- (b) 140 ppm corrected to 3% Oxygen content when firing Number 2 fuel oil, and
- (c) 8.2 tons per year on a twelve month rolling period.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for sulfur dioxide.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

SULFUR OXIDES EMISSIONS

- (a) The sulfur oxide emission limit for this source is 0.5 lb/million Btu, heat input, determined over a 30-day rolling average pursuant to 40 CFR 60.42c (d) and (g).
- (b) The permittee shall demonstrate compliance with this condition by using No. 2 fuel oil that contains less than 0.2 percent, by weight sulfur. This will be documented by obtaining a certification from the fuel oil supplier that the No. 2 fuel oil delivered to the facility contained less than 0.2 percent, by weight sulfur, pursuant to 40 CFR 60.42c(h).

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for particulate matter.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

Opacity Standard:

- (a) The permittee shall not cause to be discharged into the atmosphere from the boiler any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (b) The opacity standards under this condition apply at all times, except during periods of startup, shutdown, or malfunction.

SECTION D. Source Level Requirements

Fuel Restriction(s).

004 [25 Pa. Code §123.22]

Combustion units

Beginning July 1, 2016, the maximum sulfur content in commercial fuel oil shall not exceed 0.05% by weight, except as specified in subparagraphs (ii) and (iii) of 25 Pa. Code § 123.22(e)(2) .

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall use natural gas as the primary fuel for this boiler.

(b). The permittee shall only burn No. 2 fuel oil during periods of gas curtailment, gas emergencies, or periodic testing of liquid fuel.

(c). The permittee shall limit the burning of No. 2 fuel oil for periodic testing of liquid fuels to less than 48 hours during any calendar year.

[Compliance with conditions (b) and (c) above, ensures that this source is considered a gas fired boiler for the purposes of 40 C.F.R. Part 63 Subpart JJJJJJ]

Throughput Restriction(s).

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

(a) The total amount of Number 2 fuel oil fired in Boiler #44 and Boiler #45 shall not exceed 478,286 gallons in a twelve (12) month rolling period.

(b) The total amount of Natural gas fired in Boiler #44 and Boiler #45 shall not exceed 205.3 million cubic feet in a twelve month rolling period.

II. TESTING REQUIREMENTS.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44c]

**Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Compliance and performance test methods and procedures for sulfur dioxide.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR Section 60.48c(f)(1), (2), or (3), as applicable.

III. MONITORING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following:

(a) the hours of operation, monthly, and

(b) the fuel usage monthly and on a 12-month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

SECTION D. Source Level Requirements

The permittee shall keep records of the annual tune-up in a binder located on-site and/or in an equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NO_x emission rates, and
- (e) the final excess oxygen rate.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records to show compliance with all applicable requirements of 40 CFR Subpart Dc, 40 CFR 63 Subpart JJJJJ and state requirements, which shall include but not limited to:

- (a) the parameters monitored to ensure compliance with the sulfur oxides, particulate matter and nitrogen oxides limitations,
- (b) all tests conducted,
- (c) any malfunctions,
- (d) amount and type of fuel used monthly and on a 12-month rolling sum,
- (e) receipts from fuel supplier, and
- (f) hours of operations, monthly.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall keep records of the following:

- (a) A certification from the fuel supplier of the type of fuel delivered.
- (b) A certification that the fuel complies with ASTM D396-78 "Standard Specification for Fuel Oils."

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the following when this source burns No. 2 Fuel Oil:

- a. The date and duration of burning No. 2 fuel oil, recorded in hours
- b. The reason for burning No. 2 fuel oil, and
- c. The hours per calendar year that No. 2 fuel oil was used for periodic testing of liquid fuels.

V. REPORTING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 40 CFR § 60.4]

The permittee shall submit copies of all requests, reports, application, submittals, and other communications to both EPA

SECTION D. Source Level Requirements

and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19107.

014 [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.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification shall include the following. In addition to records of fuel supplier certifications, the semi-annual report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted.

(i) The name of the oil supplier; and

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR Section 60.41c.

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

016 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The boiler shall be equipped with low NOx burners with flue gas recirculation.

017 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The permittee shall conduct an annual tune-up consisting of the following:

(a) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of Nitrogen Oxides (NOx), and to the extent practicable, minimize the emissions of Carbon Monoxide (CO).

(c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

018 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

**SECTION D. Source Level Requirements**

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating 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. *****

SECTION D. Source Level Requirements

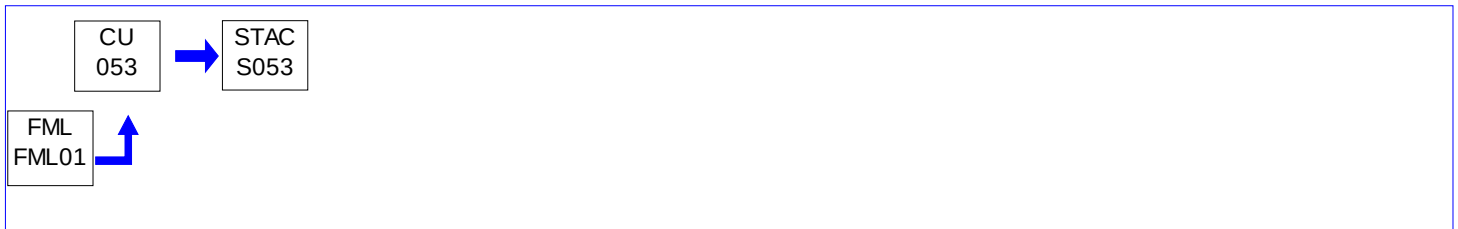
Source ID: 053

Source Name: CLEAVER BROOKS 800 (BLDG 40)

Source Capacity/Throughput: 32.700 MMBTU/HR

32.700 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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall assure compliance with the following emission concentration limits via stack testing:

(a). 30 ppmdv NO_x at 3% O₂,

(b). 300 ppmdv CO at 3% O₂.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]**Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for sulfur dioxide.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

SULFUR OXIDES EMISSIONS

(a) The sulfur oxide emission limit for this source is 0.5 lb/million Btu, heat input, determined over a 30-day rolling average pursuant to 40 CFR 60.42c (d) and (g).

Fuel Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall only use natural gas as fuel for this source.

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a stack test using the Department-approved procedures, every five (5) years or once within the life of the permit. Such testing shall be conducted at least 12 months prior to the expiration of this permit. The stack test results shall be submitted for review no later than 6 months before the permit expiration.

(b) At least sixty (60) days prior to the test, the permittee 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.

(c) The stack test shall, at a minimum, test for the NO_x and CO concentration limits established for this source. Tests shall be conducted in accordance with the provisions of [EPA Method/s] and 25 Pa. Code Chapter 139.

SECTION D. Source Level Requirements

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

III. MONITORING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following:

- (a) the hours of operation, monthly, and
- (b) the fuel usage monthly and on a 12-month rolling sum.

[Compliance with paragraph (b) above, assures compliance with 40 C.F.R. § 60.48c(g)]

IV. RECORDKEEPING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority of this permit condition is also derived from 25 Pa. Code § 129.91-129.95]

The permittee shall keep records of the annual tune-up in a binder located on-site and/or in an equivalent electronic format, which include but not limited to:

- (a) the date of the tuning procedure,
- (b) the name of the service company and technicians,
- (c) the final operating rate or load,
- (d) the final CO and NO_x emission rates, and
- (e) the final excess oxygen rate.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall maintain records to show compliance with all applicable requirements of 40 CFR Subpart Dc and state requirements, which shall include but not limited to:

- (a) the parameters monitored to ensure compliance with the sulfur oxides, particulate matter and nitrogen oxides limitations,
- (b) all tests conducted,
- (c) any malfunctions,
- (d) amount and type of fuel used monthly and on a 12-month rolling sum,
- (e) hours of operations, monthly.

009 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

SECTION D. Source Level Requirements

Each adjustment conducted under the tune-up procedures for this source, shall be recorded in a permanently bound log book or equivalent electronic format and contain the following:

- (a) the date of the tuning procedure;
- (b) the name of the service company and technician;
- (c) the final operating rate or load;
- (d) the final CO and NO_x emission rates; and
- (e) the final excess oxygen rate.

V. REPORTING REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 40 CFR § 60.4]

The permittee shall submit copies of all requests, reports, application, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19107.

VI. WORK PRACTICE REQUIREMENTS.**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The annual adjustment shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The boiler shall be equipped with low NO_x burners with flue gas recirculation.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 129.95]

The emissions of the Volatile Organic Compounds (VOCs) shall be minimized by annual combustion tuning and/or good operating practices.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall operate and maintain this source in accordance with the manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This source consists of a Cleaver Brooks Boiler, Model No. CBLE-200-800-150#ST with a rated capacity of 32.7 MMBTU/HR equipped with a Low NO_x burner and Flue Gas Recirculation (FGR).

SECTION D. Source Level Requirements

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.7575]

According to 40 C.F.R. Part 63 Subpart JJJJJJ, for the purpose of fuel, this boiler is categorized as a boiler greater than 10 MMBTU/HR and uses gaseous fuel.

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

SECTION D. Source Level Requirements

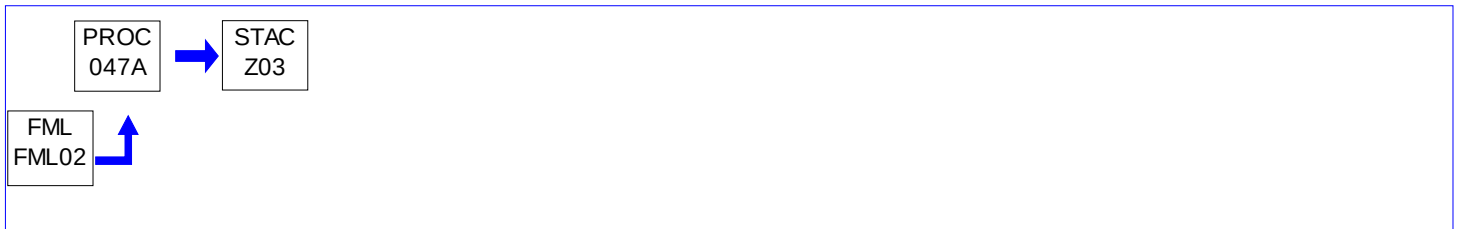
Source ID: 047A

Source Name: #2 OIL EMERGENCY GENERATORS (13)

Source Capacity/Throughput: 92.400 MMBTU/HR

N/A

DIESEL FUEL/ # 2 OIL

**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 from these generators at any time, in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §123.21]**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from these generators 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.

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall limit the combined NO_x emissions from building 24, 1500 KW emergency generator and building 4, 1200 KW emergency generator to 998 pounds of NO_x per day.

004 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code 129.91-129.95]

(a) The Nitrogen Oxide (NO_x) emissions from Building 4, 1,200 kW Emergency Generator shall not exceed four (4) tons per year on a twelve (12) month rolling period.

(b) The Nitrogen Oxide (NO_x) emissions from Building 20, 900 kW Emergency Generator shall not exceed three (3) tons per year on a twelve (12) month rolling period.

005 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The Caterpillar 1500 KW Emergency Generator located in building 24 shall have the following emission limits calculated on a 12-month rolling sum:

Carbon Monoxide (CO) shall be less than 1.15 tons.

Particulate Matter (PM) shall be less than 0.1 tons.

Nitrogen Oxide (NO_x) shall be less than 3.82 tons.

006 [25 Pa. Code §129.203]**Stationary internal combustion engines.**

(a) For generators with a horsepower rating greater than 1000 hp, the permittee shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that

SECTION D. Source Level Requirements

period.

(b) The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in paragraph (1) or (2).

(1) For a spark-ignited engine, 3.0 grams of NO_x per brake horsepower-hour.

(2) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NO_x per brake horsepower-hour.

(c) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and § 129.204, as follows:

(1) For a replaced spark-ignited engine, 3.0 grams of NO_x per brake horsepower-hour of the replacement motor, less 1.5 pounds of NO_x per MWH of electricity consumed by the replacement motor.

(2) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NO_x per brake horsepower-hour, less 1.5 pounds of NO_x per MWH of electricity consumed by the replacement motor.

007 [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 manufacturer?

[Additional Authority for this permit condition was derived from 40 C.F.R. 60.4202(b)(1) and Table 1 of 40 C.F.R. 60 Subpart IIII]

This condition only applies to the Caterpillar (3-3) 2500 kw, building 3 emergency generator, indicated as No. 047q under this Source ID.

The permittee shall ensure that this generator meets the following emission standards:

Hydrocarbons (HC): 1.3 g/kW-hr and 1.0 g/hp-hr

Nitrogen Oxides (NO_x): 9.2 g/kW-hr and 6.9 g/hp-hr

Carbon Monoxide (CO): 11.4 g/kW-hr and 8.5 g/hp-hr

Particulate Matter (PM): 0.54 g/kW-hr and 0.40 g/hp-hr

008 [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 manufacturer?

[Additional Authority for this permit condition was derived from 40 C.F.R. § 60.4202(b)(2) and 40 C.F.R. § 89.112]

This condition only applies to the Emergency Generator 38-3, 1500 kw, building 38 emergency generator, indicated as No. 047p under this Source ID.

The permittee shall ensure that this generator meets the following emission standards:

Non-methane Hydrocarbons plus Nitrogen Oxides (NMHC+NO_x): 6.4 g/kW-hr

Carbon Monoxide (CO): 3.5 g/kW-hr

Particulate Matter (PM): 0.20 g/kW-hr

SECTION D. Source Level Requirements

009 [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 manufacturer?

[Additional Authority for this permit condition was derived from 40 C.F.R. § 60.4202(b)(2) and 40 C.F.R. § 89.112]

This condition only applies to the Onan (17), 100 kw, building 17 emergency generator, indicated as No. 047r under this Source ID.

The permittee shall ensure that this generator meets the following emission standards:

Non-methane Hydrocarbons plus Nitrogen Oxides (NMHC+NOx): 4.0 g/kW-hr

Carbon Monoxide (CO): 5.0 g/kW-hr

Particulate Matter (PM): 0.30 g/kW-hr

Fuel Restriction(s).

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use Non-road diesel fuel to fire these generators.

011 [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 this subpart?

[Additional Authority for this permit condition is also derived from 40 CFR 80.510(b)]

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

The permittee shall ensure that all diesel fuel meets the following per-gallon standards:

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

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

(i) A minimum cetane index of 40; or

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

Operation Hours Restriction(s).

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91-129.95.]

(a) The permittee shall not operate any of these emergency generators more than 500 hours in any twelve (12) consecutive month period with the exception of the following:

(1) No.047l, Biopharm, UM40, 750kW Emergency Generator.

(2) No. 047m, Building 20, 900 kW Emergency Generator

SECTION D. Source Level Requirements

(3) No. 047n, Building 4, 1,200 kW Emergency Generator

(b) The above listed Emergency Generators shall be operated no more than 200 hours in any twelve (12) consecutive month period.

013 [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?

[Additional Authority for this permit condition was derived from 40 C.F.R. § 60.4211(f)]

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

(a). These emergency generators shall be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

(b). Maintenance checks and readiness testing of such units is limited to 100 hours per year.

(c). There is no time limit on the use of emergency situations. The permittee 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 year.

014 [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?

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 60.4211(f)]

The permittee may operate these emergency generators for any combination of the purposes listed below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 C.F.R. § 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this condition.

(a) May be operated for maintenance checks and readiness testing,

(b) May be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(c) May be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

015 [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?

The permittee may operate these emergency generators 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 readiness-testing and emergency demand response.

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator,

SECTION D. Source Level Requirements

indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

016 [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?

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

017 [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?

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.6625(h)]

The permittee shall limit the engine's time spent at idle during startup and limit the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

018 [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?

[Additional Authority for this condition was derived from 40 C.F.R. § 63.6640(f)]

The permittee shall operate the emergency stationary RICE according to the requirements in paragraphs (1) through (3). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

SECTION D. Source Level Requirements

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph.

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

Throughput Restriction(s).

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 129.91-129.95]

Building 4, 1200 kW Emergency Generator ONLY:

The throughput for this generator shall not exceed 17,000 gallons per year on a twelve (12) month rolling period.

II. TESTING REQUIREMENTS.

020 [25 Pa. Code §139.16]

Sulfur in fuel oil.

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall monitor the amount of fuel consumed and the hours of operation for each generator monthly and on a 12-month rolling sum.

022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following:

1. The CO, PM and NOx emissions from the Bldg 24, 1500 KW Emergency Generator monthly and on a 12 month rolling sum.
2. The combined NOx emissions in lbs/day for the Bldg 24, 1500 kW and the Bldg 4, 1200 kW emergency generators.
3. The NOx emissions in tons for Bldg 4, 1200 kW emergency generator monthly and on a 12-month rolling sum, and
4. The NOx emissions in tons for Bldg 20, 900 kW emergency generator monthly and on a 12-month rolling sum.

023 [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?

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

IV. RECORDKEEPING REQUIREMENTS.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.511]

The permittee shall keep records of the amount of fuel consumed and the hours of operation for each generator monthly and on a 12-month rolling sum.

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this condition is derived from 40 C.F.R. § 60.4214(b) and (c)]

(a). The permittee shall keep records of the hours of operation for these emergency generators in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation and the reason the engine was in operation during that time.

(b). If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

SECTION D. Source Level Requirements**# 026 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the following information for each shipment of diesel fuel received for these generators, obtained either by laboratory analysis or from the fuel suppliers certification:

- (a). The sulfur content
- (b). The cetane index or the aromatic content

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

027 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records on site to demonstrate compliance that these engines are EPA Tier II or III certified engines and are in compliance with the emission standards required by 40 C.F.R. § 60.4202(b).

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

028 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records of the following:

1. The CO, PM and NOx emissions from the Bldg 24, 1500 KW Emergency Generator monthly and on a 12 month rolling sum.
2. The combined NOx emissions in lbs/day for the Bldg 24, 1500 kW and the Bldg 4, 1200 kW emergency generators.
3. The NOx emissions in tons for Bldg 4, 1200 kW emergency generator monthly and on a 12-month rolling sum, and
4. The NOx emissions in tons for Bldg 20, 900 kW emergency generator monthly and on a 12-month rolling sum.

029 [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?**

The permittee shall keep records of when the following operational maintenance services were performed on each generator associated with this source, to include the date and hour reading on the hour meter of the generator:

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

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047k (Caterpillar 38-2), 047o (Onan 10-1)]

030 [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?**

- a. The permittee shall keep records of any malfunctions for the generators associated with this source. The records shall include the occurrence date, duration and corrective action taken.
- b. The permittee shall keep records of all maintenance conducted on the generators associated with this source.

SECTION D. Source Level Requirements

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

031 [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?

If the permittee utilizes the oil analysis program, the permittee must keep records of the parameters that are analyzed as part of the oil analysis 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.

[Compliance with this condition assures compliance with 40 C.F.R. § 63.6625(i)]

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

032 [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?

- The permittee shall keep records of the hours of operation for this source monthly and on a 12-month rolling sum.
- The hours of operation records shall indicate how many hours are spent for emergency operation, non-emergency operation, demand response, maintenance and readiness testing.
- The permittee shall keep records of the notification of the emergency situation, the date, start time and end time of the engine if the engine is used for demand response operation.

[Compliance with this condition assures compliance with 40 C.F.R. 63 § 63.6655(f)]

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

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.

033 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.512(h)]

The permittee shall operate and maintain these generators in accordance with manufacturer's specifications to maintain compliance with the emission limitations.

034 [25 Pa. Code §129.204]

Emission accountability.

(a) The permittee shall determine actual emissions in accordance with one of the following:

- (1) If the owner or operator of the unit is required to monitor NO_x emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved

SECTION D. Source Level Requirements

by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(2) If the owner or operator of the unit is not required to monitor NO_x emissions with a CEMS, one of the following shall be used to determine actual emissions of NO_x:

(i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x.

(ii) The maximum hourly allowable NO_x emission rate contained in the permit or the higher of the following:

(A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."

(B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.

(iii) CEMS data, if the owner or operator elects to monitor NO_x emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(b) The owner or operator of a unit subject to this section shall surrender to the Department one NO_x allowance, as defined in § 145.2 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NO_x allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.

(d) By November 1, 2005, and by November 1 of each year thereafter, an owner or operator of a unit subject to this section shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:

(1) The serial number of each NO_x allowance surrendered.

(2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(e) If an owner or operator fails to comply with subsection (e), the owner or operator shall by December 31 surrender three NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1 of that year.

(f) The surrender of NO_x allowances under subsection (f) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

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(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

(2) Each ton of excess emissions is a separate violation.

035 [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?

[Additional Authority for this permit condition is derived from 40 C.F.R. § 60.4209(a)]

The permittee shall operate and maintain a non-resettable hour meter on the emergency generators subject to this condition.

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

036 [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?

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

The permittee shall operate and maintain these emergency generators and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer.

037 [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?

[Additional Authority for this permit condition is also derived from 40 C.F.R. § 63.6625(e)]

a. The permittee shall at all times, operate and maintain this source in accordance with the manufacturer's specifications and in a manner consistent with safety and good air pollution control practices.

b. The permittee may develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

038 [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?

[Additional authority for this condition is also derived from 40 C.F.R. § 63.6625(f)]

The permittee shall operate and maintain a non-resettable hour meter on this generator.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

SECTION D. Source Level Requirements

039 [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?

The permittee shall perform the following operational maintenance services on this source:

- Change the oil filter every 500 hours of operation or annually, whichever comes first;
- Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as needed.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

040 [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?

(If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 1 of Table 2c to this subpart

- The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 C.F.R. 63 Subpart ZZZZ.
- The oil analysis must be performed at the same frequency (every 500 hours or annually, which ever comes first).
- The analysis program must at a minimum analyze the following three parameters:
Total Base Number, viscosity, and percent water content.

The 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 limits are not exceeded, the permittee is not required to change the oil.
- If any of the limits are exceeded, the permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 days or before commencing operation, whichever is later.

[This condition only applies to the following generators that are listed under this Source ID 047A: 047c(Onan 4-3), 047d (Kohler 10-2), 047f (Onan 18), 047o (Onan 10-1)]

VII. ADDITIONAL REQUIREMENTS.

041 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This Source, 047A, No.2 oil Emergency Generators, consists of the following generators:

NO. 047c	Onan (4-3)	250 kW (Bldg 4)
NO. 047d	Kohler (10-2)	180 kW (Bldg 5)
NO. 047g	Penske (11-1)	510 kW (Bldg 11)
NO. 047h	Caterpillar (24-1A)	1500 kW (Bldg 24)
NO. 047i	Detriot (24)	750 kW (Bldg 24)
NO. 047l	Caterpillar (40)	750 kW (Bldg 40)
NO. 047m	Detriot (20)	900 kW (Bldg 20)
NO. 047n	Detriot (4-1A)	1200 kW (Bldg 4)
NO. 047o	Onan (10-1)	80 kW (Bldg 10)

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NO. 047p Emergency Gen (38-3) 1500 kW (Bldg 38)
NO. 047q Caterpillar (3-3) 2500 kW (Bldg 3)
NO. 047r Onan (17) 100 kW (Bldg 17)

042 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional Authority for this permit condition is derived from 40 C.F.R. § 63.6590(c)]

[This condition applies to the following emergency generators only: Caterpillar (3-3) 2500 kw, building 3 generator, indicated as No. 047q under this Source ID; building 38 generator 38-3, 1500 kw, indicated as No. 047p under this source ID; and the Onan (17) generator, 100 kw, building 17, indicated as No. 047r under this source ID.]

These emergency generators meet the requirements of 40 C.F.R. 63 Subpart ZZZZ by complying with the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines.

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

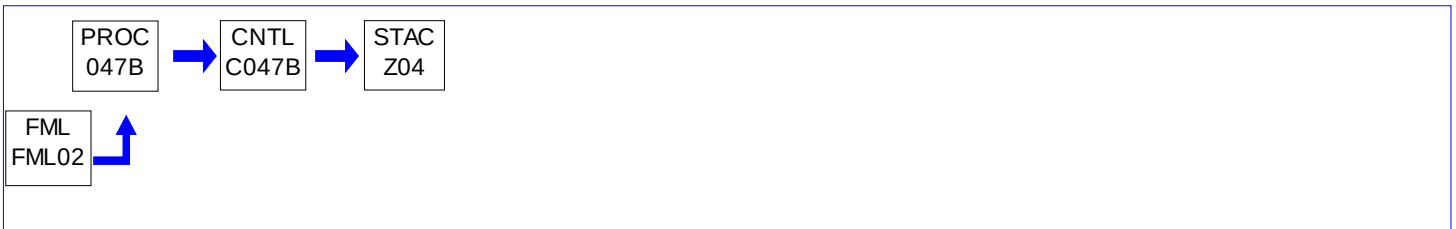
SECTION D. Source Level Requirements

Source ID: 047B

Source Name: (5) DETROIT DIESEL GENERATORS

Source Capacity/Throughput: 555.000 Gal/HR

DIESEL / #2 OIL

**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 from any of these five (5) generators at any time, in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The aggregate emissions from these five (5) Detroit generators shall not exceed any of the following limits:

NOx: 439 lbs/hr or 24.2 tons in any 12 consecutive month period.

CO: 181 lbs/hr or 9.96 tons in any 12 consecutive month period.

SOx: 23 lbs/hr or 1.27 tons in any 12 consecutive month period.

PM: 6.96 lbs/hr or 0.38 tons in any 12 consecutive month period.

NMHC: 3.64 lbs/hr or 0.20 tons in any 12 consecutive month period.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

In accordance with 40 C.F.R. § 63.6606(d), Tables 2c, the permittee shall limit the concentration of CO in the stationary RICE exhaust to 23 ppmvd or less, corrected to 15% oxygen; or reduce CO emissions by 70 percent or more.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

In accordance with 40 C.F.R. § 63.6600(d), Table 2b, the permittee shall:

a. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test, except for periods of start up which may not exceed 30 minutes, and

b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F, except for periods of start up which may not exceed 30 minutes.

Fuel Restriction(s).**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The No. 2 fuel oil or diesel fuel fired in these engines shall not, at any time, exceed 15ppm (by weight) sulfur content.

[Compliance with this condition assures compliance with 25 Pa. Code § 123.21]

SECTION D. Source Level Requirements**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Only No. 2 fuel oil or diesel fuel shall be used in the operation of these five (5) Detroit generators.

No reclaimed waste oil or other waste materials shall be added to the fuel.

007 [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?**

[Additional Authority for this permit condition is also derived from 25 Pa. Code § 127.12b and 40 C.F.R. Part 80 § 80.510(b)]

The permittee shall ensure that all diesel fuel complies with the following per-gallon standards:

1. Sulfur content less than 15 ppm
2. Cetane index or aromatic content, as follows:
 - a. A minimum cetane index of 40; or
 - b. A maximum aromatic content of 35 volume percent.

[Compliance with this condition assures compliance with 25 Pa. Code § 123.21]

Throughput Restriction(s).**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the fuel usage for each of the five (5) Detroit generators to less than 12,210 gallons per year, per generator, calculated on a 12 month rolling sum.

II. TESTING REQUIREMENTS.**# 009 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)-(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6615]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****When must I conduct subsequent performance tests?**

[Additional Authority for this permit condition is also derived from 25 Pa. Code § 127.12b and 40 C.F.R. 63 § 63.6610]

- (a). The permittee shall perform an initial performance test in accordance with 40 C.F.R. 63 Subpart ZZZZ, Table 4 no later than October 30, 2013.
- (b). Subsequent performance testing in accordance with 40 C.F.R. Subpart ZZZZ, Table 3 (Item 4) shall be performed every 8760 operating hours or three (3) years, whichever comes first.

SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the operating hours and fuel usage for each of the five (5) Detroit generators on a monthly basis, using a Department approved method.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and monitor the actual and allowable NOx emissions during the period from May 1st through September 30th each year pursuant to 25 Pa. Code 129.203.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the aggregate NOx, CO, SOx, PM and NMHC emissions from these 5 Detroit generators on a monthly basis.

014 [25 Pa. Code §129.203]

Stationary internal combustion engines.

(a) By October 31 of each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.

(b) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in paragraph (1) or (2).

(1) For a spark-ignited engine, 3.0 grams of NOx per brake horsepower-hour.

(2) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour.

(c) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and 25 Pa. Code § 129.204, as follows:

(1) For a replaced spark-ignited engine, 3.0 grams of NOx per brake horsepower-hour of the replacement motor, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

(2) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

015 [25 Pa. Code §129.204]

Emission accountability.

The owner or operator shall determine actual emissions in accordance with one of the following:

(1) If the owner or operator of the unit is required to monitor NOx emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions NOx:

(i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.

(ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:

(A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."

SECTION D. Source Level Requirements

(B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.

(iii) CEMS data, if the owner or operator elects to monitor NO_x emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the owner or operator may request an adjustment to the allowable emissions calculations set forth in 25 Pa. Code §§ 129.201--129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

016 [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?

The permittee shall monitor the following on a daily basis while each engine is operating:

- (a). Collecting the catalyst inlet temperature data according to 40 C.F.R. 63 § 63.6625; and
- (b). Measuring the pressure drop across the catalyst and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

IV. RECORDKEEPING REQUIREMENTS.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall obtain from the fuel oil supplier, a delivery receipt that certifies the sulfur, by weight, is less than or equal to 15ppm and the receipt should show the cetane index or aromatic content, each time a delivery is made.

In the event that a delivery is made, and no receipt is obtained, the permittee shall perform testing in accordance with 25 Pa. Code § 139.16.

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep an operating record of the days and hours of operation, reason for operation, fuel usage (calculated monthly and on a 12-month rolling sum) while operating, and dates of any inspections, adjustments and breakdowns.

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the operating hours of these five (5) generators during PJM programs, as well as active load management (ALM), load shedding, emergency use, and while performing routine testing, repairs, and preventive maintenance activities to ensure that each generator does not exceed 12,210 gallons of fuel usage during any 12-consecutive-month period.

020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the actual and allowable NO_x emissions during the period from May 1st through September 30th each year pursuant to 25 Pa. Code 129.203.

SECTION D. Source Level Requirements

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the aggregate NO_x, CO, SO_x, PM and NMHC emissions from these 5 Detroit generators monthly and on a 12-month rolling sum.

022 [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?

[Additional Authority for this permit condition is also derived from 25 Pa. Code § 127.12b]

The permittee shall maintain records of the following:

- (a). A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status.
- (b). Records of the occurrence and duration of each malfunction of the control or monitoring equipment and the corrective action taken.
- (c). Records of the fuel supplier receipts, indicating the sulfur content meets the requirements of 40 C.F.R. 80.510(b).
- (d). Records of the maintenance conducted on the engine in order to demonstrate the engine and control device was operated and maintained in accordance with the manufacturer's specifications or the permittee's maintenance plan.
- (e). Records of the performance test and test results.
- (f). Records of the catalyst inlet temperature, and
- (g). Records of the pressure drop across the catalyst.

V. REPORTING REQUIREMENTS.

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]

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

What reports must I submit and when?

[Additional Authority for this permit condition was also derived from 25 Pa. Code 127.12b and 40 C.F.R. 63, Subpart ZZZZ, Table 7]

- (a). The first semi-annual compliance report shall be completed as part of the Permittee's Title V semi-annual deviation report and shall cover the period from the compliance date through the end of the calendar half (May 3, 2013 through June 30, 2013).
 - (1). The report shall contain the description of each malfunction, including the number, duration, and causes of deviations from an emission limit or operating limitation, and the corrective action taken. If no deviations occurred during the reporting period, the report must state this.
- (b). Notification of performance tests and their results shall follow the same procedures as PADEP's stack testing guidelines.

VI. WORK PRACTICE REQUIREMENTS.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use these five (5) generators during electrical power failures, electrical system/grid emergencies (as part of PJM's curtailment programs such as Reliability Pricing Model and Synchronized Reserve, as revised, their

SECTION D. Source Level Requirements

successor programs, and future PJM reserve programs) as well as active load management (ALM), load shedding, emergency use, and to perform routine testing, repairs, and preventive maintenance.

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional Authority for this permit condition is also derived from 25 Pa. Code § 129.91-95]

(a). The permittee shall operate and maintain the engines in accordance with the manufacturer's specifications.

(b). The permittee shall install, operate and maintain the oxidation catalyst in accordance with the manufacturer's specifications.

026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each engine shall be controlled by an oxidation catalyst.

027 [25 Pa. Code §129.204]

Emission accountability.

(a) The owner or operator shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR Sections 96.102 and 96.302 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(b) If the combined allowable emissions from May 1 through September 30 exceed the combined actual emissions during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.

(c) By November 1 of each year, an owner or operator shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:

(1) The serial number of each NOx allowance surrendered.

(2) The calculations used to determine the quantity of NOx allowances required to be surrendered.

(d) If an owner or operator fails to comply with paragraph (c), the owner or operator shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.

(e) The surrender of NOx allowances under paragraph (d) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

(2) Each ton of excess emissions is a separate violation.

028 [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?

The engine must be in compliance with the requirements of Subpart ZZZZ at all times and must operate and maintain the

SECTION D. Source Level Requirements

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.

029 [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?

[Additional Authority for this permit condition is also derived from 25 Pa. Code § 127.12b]

(a). The permittee shall minimize each 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 thirty (30) minutes.

(b). The permittee must either install a closed crankhouse ventilation system or install an open crankhouse filtration emission control system on the engine. Manufacturer specified maintenance requirements must be followed or an alternate maintenance program can be proposed and approved by the Administrator.

VII. ADDITIONAL REQUIREMENTS.

030 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consist consists of the following:

Five (5), 1600 KW, Detroit Diesel Generators, each with a throughput of 111.0 gal/hour located in building 32.

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

SECTION D. Source Level Requirements

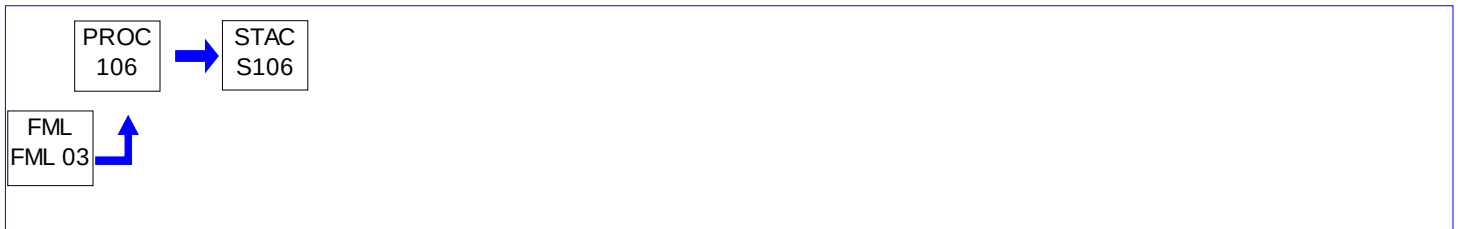
Source ID: 106

Source Name: BLDG 40 EGEN 2

Source Capacity/Throughput:

53.500 Gal/HR

NON-ROAD DIESEL FUEL

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.41]****Limitations**

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:

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

[Compliance with this condition assures compliance with 40 C.F.R. Part 89 § 89.113(a)]

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

No person shall permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

[Compliance with this condition assures compliance with 40 C.F.R. 80 § 80.510(b)]

Pursuant to 25 Pa.Code § 123.22, the sulfur content of diesel used in the inner zone of the Southeast region should not exceed 0.2%, this assures compliance with 25 Pa.Code § 123.21.

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

No person shall permit the emission into the outdoor atmosphere of particulate matter from this source in excess of 0.02 gr/dscf, pursuant to 25 Pa. Code § 127.12(a)(5).

004 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall limit the emissions from this generator to less than the following:

NO_x: 13.65 lb/hr; and 1.71 tpy calculated on a 12-month rolling sum.

CO: 0.62 lb/hr; and 0.08 tpy calculated on a 12-month rolling sum.

VOC: 0.08 lb/hr; and 0.01 tpy calculated on a 12-month rolling sum.

PM₁₀: 0.06 lb/hr; and 0.01 tpy calculated on a 12-month rolling sum.

SO₂: 0.38 lb/hr; and 0.05 tpy calculated on a 12-month rolling sum.

005 [25 Pa. Code §129.203]**Stationary internal combustion engines.**

The permittee shall calculate the difference between the actual NO_x emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.

SECTION D. Source Level Requirements

The permittee shall calculate the allowable NO_x emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in (1) or (2) below.

- (1) For a spark-ignited engine, 3.0 grams of NO_x per brake horsepower-hour.
- (2) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NO_x per brake horsepower-hour.

Fuel Restriction(s).

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 C.F.R. Part 80 § 80.510(a)]

(a). The permittee shall use only non-road diesel fuel for this source. The non-road diesel fuel shall comply with the following per-gallon standards:

- (1). Cetane index or aromatic content, as follows:
 - (i). A minimum cetane index of 40; or
 - (ii). A maximum aromatic content of 35 volume percent.
- (2). Sulfur Content: 15 ppm maximum.

Operation Hours Restriction(s).

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The non-emergency generator, EGEN 2, may be used during electrical power failures, electric system/grid emergencies, peak shaving, load shedding, and demand response programs, or to perform preventive maintenance and periodic readiness testing.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following condition applies to start ups and monthly testing of the engine for maintenance purposes:

(a). The permittee shall limit the frequency of testing for maintenance purposes of the engine to 45 minutes per month during the ozone season. The tests shall be conducted between 5pm and 11pm during the ozone season. The testing shall not be performed on those days when the Air Quality Index is forecasted to reach or exceed 100.

[The ozone season is defined as the period of time from May 1st through September 30th of each year.]

Throughput Restriction(s).

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the total fuel usage of this generator to less than 13,375 gallons per year calculated on a 12-month rolling sum.

II. TESTING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The following are applicable to the analysis of commercial fuel oil:

(1) the fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references);

SECTION D. Source Level Requirements

(2) test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15); and

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the annual operating hours for readiness testing and maintenance monthly and on a 12-month rolling sum.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and monitor the actual and allowable NOx emissions during the period from May 1st through September 30th each year pursuant to 25 Pa. Code § 129.203.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and calculate the NOx, CO, VOC, PM10 and SO2 emissions from this generator monthly.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the fuel usage for this generator monthly and on a 12-month rolling sum.

015 [25 Pa. Code §129.204]

Emission accountability.

(a). The owner or operator shall determine the actual NOx emissions in accordance with 25 Pa. Code § 129.204(b)(2)(ii), using the manufacturer's emission factor of 5.32 g/hp-hr.

(b). An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the owner or operator may request an adjustment to the allowable emissions calculations set forth in §§ 129.201--129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]

Subpart III - 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 of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

IV. RECORDKEEPING REQUIREMENTS.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall 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.

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the annual operating hours for readiness testing and maintenance monthly and on a

SECTION D. Source Level Requirements

12-month rolling sum.

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the actual and allowable NOx emissions during the period from May 1st through September 30th each year.

020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the NOx, CO, VOC, PM10 and SO2 emissions from this generator monthly and on a 12-month rolling sum.

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the fuel usage for this generator monthly and on a 12-month rolling sum.

022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each shipment of diesel fuel received for this generator, the permittee shall keep records of the following information, obtained either by laboratory analysis or from the fuel supplier's certification:

- (a). The sulfur content.
- (b). The cetane index or the aromatic content.
- (c). The maximum sulfur content.

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached.

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.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain a non-resettable hour meter on this non-emergency generator.

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a). The permittee shall use the following manufacturer's emission factors when calculating emissions based on hours of operation:

- NOx: 5.32 g/hp-hr
- CO: 0.24 g/hp-hr
- VOC: 0.03 g/hp-hr
- PM10: 0.02 g/hp-hr

[Compliance with paragraph (a) above ensures compliance with 40 C.F.R. § 60.4202]

(b). The permittee shall use the following emission factors when calculating emissions based on fuel usage:

- NOx: 0.23 lb/gal
- CO: 0.01 lb/gal

SECTION D. Source Level Requirements

- VOC: 0.001 lb/gal
- PM10: 0.001 lb/gal

026 [25 Pa. Code §129.204]

Emission accountability.

(a) The owner or operator of a unit subject to this section shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(b) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.

(c) By November 1 of each year, an owner or operator of a unit subject to this section shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:

- (1) The serial number of each NO_x allowance surrendered.
- (2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(d) If an owner or operator fails to comply with subsection (e), the owner or operator shall by December 31 surrender three NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1 of that year.

(e) The surrender of NO_x allowances under subsection (f) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

- (2) Each ton of excess emissions is a separate violation.

027 [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?

(1) The permittee shall operate and maintain the stationary CI internal combustion engine according to the manufacturer's emission-related written instructions.

(2) The permittee shall change only those emission-related settings that are permitted by the manufacturer.

VII. ADDITIONAL REQUIREMENTS.

028 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This non-emergency generator is subject to Subpart IIII of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. In accordance with 40 C.F.R. Part 60 § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the EPA and the

SECTION D. Source Level Requirements

Department. The EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

029 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of a 750 kw diesel fired non-emergency generator, Manufactured by Caterpillar, Model number C27.

030 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Additional Authority for this permit condition is derived from 40 C.F.R. § 63.6590(c)]

This non-emergency generator meets the requirements of 40 C.F.R. 63 Subpart ZZZZ by complying with the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines.

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

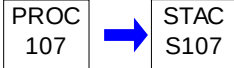
SECTION D. Source Level Requirements

Source ID: 107

Source Name: PHARMACEUTICAL MANUFACTURING BLDG 40

Source Capacity/Throughput:

N/A



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.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the following on a monthly basis and a 12-month rolling basis:

- (1) The amount and types of HAPs used in the pharmaceutical manufacturing process.
- (2) The individual HAP and combined HAP emissions from the pharmaceutical manufacturing process.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1259]

Subpart GGG - National Emission Standards for Pharmaceuticals Production

Recordkeeping requirements

(a) As per 40 CFR §63.1259(a), the permittee shall comply with the recordkeeping requirements in Table 1 Subpart A of Part 63 and as indicated below.

- (1) The permittee shall keep copies of all records and reports required by 40 CFR Part 63, Subpart GGG for at least 5 years, as specified in 40 CFR §63.10(b)(1).
- (2) The permittee shall keep a record of the applicability determinations, as specified in 40 CFR §63.10(b)(3).
- (3) The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.1250(g)(3), including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- (4) For new affected sources, the permittee shall comply with the provisions in 40 CFR §63.5 regarding construction and reconstruction.

(b) As per 40 CFR §63.1259, the permittee shall also maintain records of the following:

- (1) The number of batches manufactured per year of Albi and Mepo bulk drug substances.
- (2) Standard batch uncontrolled and controlled emissions for each process.

SECTION D. Source Level Requirements

(3) Actual uncontrolled and controlled emissions for each nonstandard batch.

(4) A record of whether each batch was considered a standard batch.

V. REPORTING REQUIREMENTS.

**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1260]
Subpart GGG - National Emission Standards for Pharmaceuticals Production
Reporting requirements**

As per 40 CFR §63.1260(a), the permittee shall comply with the following reporting requirements. Also, applicable reporting requirements of 40 CFR §§63.9 and 63.10 are also summarized in Table 1 of 40 CFR Part 63, Subpart GGG.

(1) The permittee shall submit the applicable initial notification in accordance with 40 CFR §63.9(b) or (d).

(2) The Notification of Compliance Status report required under 40 CFR §63.9 shall be submitted no later than 150 days after the compliance date and shall include:

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP emissions from the affected source.

(ii) The results of emissions profiles, engineering analyses, design evaluations, or calculations used to demonstrate compliance.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the values of monitored parameters established during the initial compliance determinations, including data and calculations to support the levels established.

(iv) Listing of all operating scenarios.

(3) The permittee shall prepare Periodic reports and submit them to the Administrator in accordance with the following:

(i) The first report shall be submitted no later than 240 days after the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Each subsequent Periodic report shall cover the 6-month period following the preceding period, and should coincide with the due dates and be reported on the Annual Certificate of Compliance and the Semi-Annual Deviation Report in accordance with Section C Condition #019.

(ii) When the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the affected source.

(4) Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit the information specified below with the next Periodic report required:

(i) A brief description of the process change.

(ii) A description of any modifications to standard procedures or quality assurance procedures.

(iii) Revisions to any of the information reported in the original Notification of Compliance Status Report.

(iv) Information required by the Notification of Compliance Status Report for changes involving the addition of processes or equipment.

(5) The permittee may submit to the Administrator a request for an extension of compliance in accordance with 40 CFR §63.1250(f)(4).

SECTION D. Source Level Requirements**VI. WORK PRACTICE REQUIREMENTS.**

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1250]

Subpart GGG - National Emission Standards for Pharmaceuticals Production

Applicability

(a) As per 40 CFR §63.1250(c), Table 1 of subpart GGG specifies and clarifies the provisions of subpart A of part 63 that apply to the permittee.

(b) As per 40 CFR §63.1250(g)(1), each provision set forth in subpart GGG shall apply at all times, except that the provisions set forth in 40 CFR §63.1255 (equipment leaks) shall not apply during periods of nonoperation of the Pharmaceutical Manufacturing Process Unit (PMPU) in which the lines are drained and depressurized resulting in the cessation of the leak.

(c) As per 40 CFR §63.1250(g)(3), at all times, the permittee must operate and maintain any affected source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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. *****

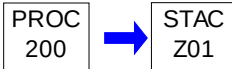
SECTION D. Source Level Requirements

Source ID: 200

Source Name: FUEL OIL STORAGE TANKS (3)

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.****Fuel Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall store the following liquid products in the respective tanks:

- (a) Tank #2A, only Number 2 Fuel oil.
- (b) Tanks #18A, #7A, only Number 6 Fuel oil.

Throughput Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall limit the maximum throughput on a twelve (12) month rolling basis for each of the following tanks:

- (a) Tank 2A = 65,000 gallons
- (b) Tank 18A = 2,480,000 gallons
- (c) Tank 7A = 1,200,000 gallons

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.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall monitor the following of each tank:

- (a) the throughputs,
- (b) the type of fuel oil stored.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 40 CFR § 60.116(b)]

- (a) The permittee shall keep records showing the dimension of each of the storage tanks and an analysis showing the capacity of each of the storage tanks.
- (b) These records shall be readily accessible to the Department upon request.

SECTION D. Source Level Requirements**V. REPORTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall keep records of the following of each tank:

- (a) the throughputs on a twelve (12) month rolling basis,
- (b) the type of fuel oil stored and its true vapor pressure, and
- (c) the results of the inspections conducted.

VI. WORK PRACTICE REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

The permittee shall conduct routine monthly inspections of each tank to ensure that there are no visible holes or leaks.

VII. ADDITIONAL REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The Source 200: Fuel Oil Storage Tanks (3) represents the following:

- T2A Tank 2A = 20,000 gallon #2 Fuel Storage Tank (Bldg 32)
- T18A Tank 18A = 30,000 gallon #6 Fuel Storage Tank (Bldg 19)
- T7A Tank 7A = 29,800 gallon #6 Fuel Storage Tank (Bldg 20)

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



SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

SECTION F. Emission Restriction Summary.

Source Id	Source Description										
031	CLEAVER BROOKS 1 (BLDG 20)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
Emission Limit	Pollutant										
1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
032	CLEAVER BROOKS 2 (BLDG 20)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
Emission Limit	Pollutant										
1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
033	CLEAVER BROOKS 3 (BLDG 20)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
Emission Limit	Pollutant										
1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
034	CLEAVER BROOKS 4 (BLDG 20)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
Emission Limit	Pollutant										
1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
037	CLEAVER BROOKS 9 (BLDG 3)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
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1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
038	CLEAVER BROOKS 10 (BLDG 3)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
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1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
039	CLEAVER BROOKS 11 (BLDG 3)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>1.000 Lbs/MMBTU</td><td>SOX</td></tr> <tr> <td>0.400 Lbs/MMBTU</td><td>TSP</td></tr> </table>		Emission Limit	Pollutant	1.000 Lbs/MMBTU	SOX	0.400 Lbs/MMBTU	TSP				
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1.000 Lbs/MMBTU	SOX										
0.400 Lbs/MMBTU	TSP										
051	CLEAVER BROOKS 44 (BLDG 40)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>8.200 Tons/Yr 12-month rolling sum.</td><td>NOX</td></tr> <tr> <td>30.000 PPMV (Natural gas) corr. to 3% O2</td><td>NOX</td></tr> <tr> <td>140.000 PPMV (No.2 fuel oil) corr. to 3% O2</td><td>NOX</td></tr> <tr> <td>0.500 Lbs/MMBTU</td><td>SOX</td></tr> </table>		Emission Limit	Pollutant	8.200 Tons/Yr 12-month rolling sum.	NOX	30.000 PPMV (Natural gas) corr. to 3% O2	NOX	140.000 PPMV (No.2 fuel oil) corr. to 3% O2	NOX	0.500 Lbs/MMBTU	SOX
Emission Limit	Pollutant										
8.200 Tons/Yr 12-month rolling sum.	NOX										
30.000 PPMV (Natural gas) corr. to 3% O2	NOX										
140.000 PPMV (No.2 fuel oil) corr. to 3% O2	NOX										
0.500 Lbs/MMBTU	SOX										
052	CLEAVER BROOKS 45 (BLDG 40)										
<table> <tr> <th>Emission Limit</th><th>Pollutant</th></tr> <tr> <td>8.200 Tons/Yr 12-month rolling sum.</td><td>NOX</td></tr> <tr> <td>30.000 PPMV (Natural gas) corr. to 3% O2</td><td>NOX</td></tr> </table>		Emission Limit	Pollutant	8.200 Tons/Yr 12-month rolling sum.	NOX	30.000 PPMV (Natural gas) corr. to 3% O2	NOX				
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8.200 Tons/Yr 12-month rolling sum.	NOX										
30.000 PPMV (Natural gas) corr. to 3% O2	NOX										

SECTION F. Emission Restriction Summary.

Source Id	Source Description		
	140.000 PPMV	(No.2 fuel oil) corr. to 3% O2	NOX
	0.500 Lbs/MMBTU		SOX
053	CLEAVER BROOKS 800 (BLDG 40)		
	Emission Limit		Pollutant
	300.000 PPMV	at 3% O2	CO
	30.000 PPMV	at 3% O2	NOX
047A	#2 OIL EMERGENCY GENERATORS (13)		
	Emission Limit		Pollutant
	500.000 PPMV		SOX
	0.040 gr/DRY FT3		TSP
047B	(5) DETROIT DIESEL GENERATORS		
	Emission Limit		Pollutant
	9.960 Tons/Yr	calculated on a 12-month rolling sum	CO
	0.200 Tons/Yr	calculated on a 12-month rolling sum	NMHC
	24.200 Tons/Yr	calculated on a 12-month rolling sum	NOX
	0.380 Tons/Yr	calculated on a 12-month rolling sum	PM10
	1.270 Tons/Yr	calculated on a 12-month rolling sum	SOX
	0.040 gr/DRY FT3		TSP
106	BLDG 40 EGEN 2		
	Emission Limit		Pollutant
	0.080 Tons/Yr	Calculated on a 12-month rolling sum	CO
	0.620 Lbs/Hr		CO
	1.710 Tons/Yr	Calculated on a 12-month rolling sum	NOX
	13.650 Lbs/Hr		NOX
	0.010 Tons/Yr	Calculated on a 12-month rolling sum	PM10
	0.020 gr/DRY FT3		PM10
	0.060 Lbs/Hr		PM10
	0.050 Tons/Yr	Calculated on a 12-month rolling sum	SO2
	0.380 Lbs/Hr		SO2
	500.000 PPMV		SO2
	0.010 Tons/Yr	Calculated on a 12-month rolling sum	VOC
	0.080 Lbs/Hr		VOC

Site Emission Restriction Summary

Emission Limit	Pollutant	
100.000 Tons/Yr	Based on a 12-month rolling sum	NOX
10.000 Tons/Yr	for a single HAP, calculated on 12-month rolling sum	Hazardous Air Pollutants
25.000 Tons/Yr	any combination of HAP's calculated on a 12-month rolling sum	Hazardous Air Pollutants



SECTION F. Emission Restriction Summary.

SECTION G. Miscellaneous.

(1)(a) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, or recordkeeping:

·Miscellaneous storage tanks containing:

No. 2 Fuel Oil tanks with capacity less than 5,000 gallons

Phosphoric Acid Sodium Molybdate

Sylther/Dowtherm

Aqueous Waste

Sulfuric acid; or

NaH₂SO₄

NaOH

Miscellaneous (non-VOC) substances

·Sources that use regulated amounts of CFCs

·1,850 Gallon Aboveground Hydrochloric Acid Tank (T6A)

·Bench-scale laboratory equipment used for kinetic studies, mass/energy transport studies, chemical synthesis and physical or chemical analysis, which may or may not be handled in laboratory fume hoods

(b) The following previously issued operating permit serve as the basis for certain terms and conditions set forth in this Title V Permit:

OP 46-00035, 46-313-114 (revised 8/29/01), 46-399-093 (revised 8/29/01), 46-313-131, and 46-313-113.

(c) The Department has approved the Reporting Schedule below:

COMPLIANCE CERTIFICATION

	Due Date	Period of Coverage
Initial Submission	12/28/2002	2/1/2002 to 11/30/2002
Second Submission	12/28/2003	12/1/2002 to 11/30/2003

(Follow the same schedule until permit is renewed)

REPORTING OF DEVIATIONS

	Due Date	Period of Coverage
Initial Submission	7/1/2002	2/1/2002 to 5/30/2002
Second Submission	12/28/2002	6/1/2002 to 11/30/2002
Third Submission	7/1/2003	12/1/2002 to 5/30/2003
Fourth Submission	12/28/2003	6/1/2003 to 11/30/2003

(Follow the same schedule until permit is renewed)

(2) Administrative Amendment for the following:

(a) Name change from 'GlaxoSmithKline' to 'SmithKline Beecham Pharmaceuticals dba GlaxoSmithKline'

(b) Removal of Sources #035 and 036, Boilers #7 and #8, Source C01, various type condensers and their corresponding stacks, as these sources were removed from the facility in association with the demolition of Building 1 (September 2001).

(c) Removal of Sources #040 and 041, Boilers #12 and #13, and Source 105, Pilot Laboratory - these sources were deactivated by August 2002

(d) Establish a schedule of submission for the "reporting of deviations" and the Compliance certifications

(e) Monitoring and recordkeeping frequency of the boilers and emergency generators

(f) Incorporate the amendments of Operating Permits 46-313-114 and 46-399-093

(3) Minor Modification to incorporate the following:

SECTION G. Miscellaneous.

(a) RFD No. 46-A01-191 - the modification of an acid gas scrubber for the Source 200, Synthetic Chemistry Process laboratory in building 28. The scrubber controls off-gas flows from several sources that may contain low concentrations of acid gases. Emissions will not increase.

(b) RFD No. 46-A01-1917 - the modification of the general exhaust system in building 29. The existing air exhaust system has been split into two separate systems, one for the general room exhaust and the other for processing equipment exhaust. Emissions will not increase.

(4) 02/07/05, APS: 346698, AUTH: 550241, Amended to:

(a) Incorporate Plan Approval PA 46-0035C. The Plan Approval was the increase of Number 2 fuel usage in Boiler 14 and 15, Sources 042 and 043 respectively. (These sources have removed from the permit and are present in State-only Operating Permit SOOP 46-00249)

(b) Condition #004, Sources 042 and 043 were revised as follows:

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(i) The annual use of No. 2 fuel oil shall not exceed 650,000 gallons per year.

(ii) The annual use of natural gas shall not exceed 130 million cubic feet per year.

(c) Modified to address the replacement of the current dust collector and HEPA filter by a new HEPA filter in the Central Vacuum System located in Building 29

(d) Condition #003, Source 204 was revised as follows:

The Source 204, Central Vacuum System shall consist of

(a) central vacuum

(i) central vacuum cyclonic separator

(ii) a cartridge filter

(iii) HEPA filter

(5) 03/03/05, APS: 346698, AUTH: 582202, Minor Modification

(a) Source 104, Synthetic Chem Lab (Bldg. 28). A 10 gallon reactor was replaced with a 20 gallon reactor and a 20 inch centrifuge with a new 20-inch centrifuge. No Plan Approval was required as per RFD 46-A01-2229. There is no emission increase and no change in monitoring and recordkeeping.

(b) Source 104, Condition #005, Synthetic Chemistry Process lab, has the following equipment:

(i) one 10 gallon glass lined steel reactors

(ii) two 20 gallon glass lined steel reactor

(iii) one 10 gallon Hastelloy reactor

(iv) one venturi type fume scrubbing system

(v) four primary condensers

(vi) one secondary condenser

(vii) one tray dryer

(viii) one centrifuge

(6) 10/23/08, APS: 346698, AUTH: 606523,, Amendment to remove the sources association with Building 16. The sources are as follows and they are operating under operating permit SOOP 46-00249:

(a) Source 042 - Cleaver Brooks #14

(b) Source 043 - Cleaver Brooks #15

(c) 047p from Source 047 - No.2 oil Emergency generators

(d) Tanks 13 and 14 from Source 200 -

(e) Source 201 - Hydrochloric acid tank

(7) 07/08/08, APS:346698, AUTH: 644601, Renewal and it incorporation of PA-46-0035B and PA-46-0035D.

SECTION G. Miscellaneous.

- (a) Source ID 031, Boiler No.1 in building 20 had an addition of an economizer as specified in RFD No. 46-A01-2404.
- (b) The reporting scheme in paragraph C of Section G is no longer valid. The permittee shall comply with condition number 015 of Section C.
- (c) Incorporation the Minor Operating Permit Modification submitted on May 20, 2008 to change the charging rate on the incinerator in building 21 (Source ID 002) from 300 pounds per hour to 180 pounds per hour until a stack test is conducted to demonstrate compliance with condition #001 at a higher charging rate.
- (8) 12/30/10, APS: 346698, AUTH: 854136, Minor Modification to add a condition to Source ID 47B under work practice standards to clarify that these 5 Detroit Diesel Generators are permitted to be used for multiple purposes and not just emergency use. A recordkeeping requirement was added to keep records of the usage hours to ensure the permitte does not exceed the 110 hour per year limit for each generator.
- (9) 06/01/11, APS: 748816, AUTH: 878157, Administrative Amendment incorporates Plan Approval 46-0035E (The installation of a 750 Kw diesel fired emergency generator, Source ID 106) and General Operating Permit GP1-46-0272 (The installation of a 32.7 MMBTU/HR natural gas boiler, Source ID 053).
- (10) 11/06/13, APS: 346698, AUTH: 959005, Renewal withe the following changes:
- (a) Incorporated applicable regulations from 40 C.F.R. 60 Subpart IIII, 40 C.F.R. 63 Subpart ZZZZ and 40 C.F.R. 63 Subpart DDDDD to appropriate sources.
- (b) Source ID 001 (Incinerator 1 bldg 3), Source ID 002 (Incinerator 2, bldg 21) and Source ID 003 (Incinerator 3, bldg 26) were permanently shut down and in the process of being closed in accordance with the Solid Waste Regulations. These 3 sources were removed from the permit.
- (c) Source ID 044 (Cleaver Brook 5, bldg 5) and Source ID 045 (Cleaver Brook 6, bldg 5) each boiler rated at 10.5 MMBTU/HR, were permanently shutdown and the source ID's were removed from the permit.
- (d) The clinical research lab, bldg 29 and the Central Vacuum System, bldg 29 (Source ID's 203 & 204) were permanently shutdown and the source ID's were removed from the permit.
- (e) Tank 1A, the 15,000 gallon No. 2 fuel oil storage tank at bldg 5, has been closed in place, this tank is part of Source ID 200.
- (f) The following generators that were listed under Source ID 047A have been removed:
- (i) Penske emergency generator 3-1 identified as 047A
 - (ii) Penske emergency generator 3-2 identified as 047B
 - (iii) Caterpillar emergency generator 38-1 identified as 047j
 - (iv) Onan emergency generator, 150 kW at bldg 17 was replaced with a Onan 100 kW
- (g) The following generators were added to Source ID 047A through an RFD:
- (i) Emergency generator 38-3, bldg 38, 1500 kW, RFD # 1834
 - (ii) Caterpillar emergency generator 3-3, bldg 3, 2500 kW, RFD # 1245
- (h) RFD 1384 approved March 31, 2010 allowed the installation of an 8,000 gallon Ammonium Hydroxide Storage Vessel in building 40.
- (i) RFD 1031 approved August 21, 2009 allowed the removal of a 12,000 AST containing 50% concentration of Sulfuric Acid to be replaced with a 1,000 gallon AST containing 93% concentration of Sulfuric Acid in building 20.
- (j) Source ID 104 (Synthetic Chem Lab-bldg 28) and the Alternative Operating Scenarios for Source ID 104 have been removed from the permit. Operations from this source were discontinued in February 2013. The equipment is no longer being operated nor plan on being operated at this location. The list of equipment for this Source is listed in Section G under Auth # 582202.
- (11) 12/04/13, APS: 346698, AUTH: 1049370, Amendment to incorporate PA 46-0035H for installation of oxidation catalyst on five existing emergency generators - Source ID 047B and remove the 110 hr/yr limit on each generator into an annual fuel usage limit; also increased the throughput of diesel/No. 2 fuel oil in Tank 2A from 25,000 to 65,000 gal/yr.

SECTION G. Miscellaneous.

(12) 04/02/15, APS: 346698, AUTH: 1061358, minor modification established a site wide HAP emission limit of less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPS calculated on a 12-month rolling sum. By taking this limit, GSK is now an Area Source for HAPS not a Major Source. Therefore, all references to 40 C.F.R. 63 Subpart DDDDD have been removed from the permit.

(a) Source ID 049 (Boiler MACT #2 fuel oil and natural gas boilers) was removed from the permit.

(b) Source ID 048 (Boiler MACT for #6 oil and natural gas boilers) was renamed Boiler MACT for fuel oil boilers and all references to Subpart DDDDD have been removed.

(c) By removing all conditions for the boilers pertaining to 40 C.F.R. 63 Subpart DDDDD, the boilers are now subject to the applicable requirements in 40 C.F.R. 63 Subpart JJJJJ for an Area Source of HAP's.

(13) 04/05/16, APS: 346698, AUTH: 1130230, Modified to remove 3 underground storage tanks from Source ID 200 (Tanks 7, 8 and 9) and install a new above ground storage tank (Tank 7A) approved under RFD # 5208 on August 14, 2015. Source ID 200 was renamed from Fuel Oil Storage Tanks (5) to Fuel Oil Storage Tanks (3).

(14) 08/04/16, APS: 346698, AUTH: 1142895, Modification to change Source ID No. 106 from an emergency generator to a non-emergency generator status.

(15) 12/01/16, APS: 346698, AUTH: 114510, Modification to add a facility wide NOx emission limit not to exceed 99.99 tons per year in lieu of conducting a presumptive or case-by-case RACT II analysis at this site.

(16) 02/01/17, APS: 346698, AUTH: 1161663, Significant Modification to incorporate 40 CFR Part 63 Subpart GGG regulations.



***** End of Report *****