

## JANSSEN RESEARCH & DEVELOPMENT LLC/LOWER GWYNEDD





## **COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM**

## TITLE V/STATE OPERATING PERMIT

December 19, 2024 Issue Date: Effective Date: August 1, 2025 **Revision Date:** August 1, 2025 January 27, 2030 Expiration Date:

Revision Type: Modification

> 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: 46-00027

Federal Tax Id - Plant Code: 51-0524195-1

Owner Information

Name: JANSSEN RESEARCH & DEVELOPMENT LLC

Mailing Address: 1400 MCKEAN RD

SPRING HOUSE, PA 19477

Plant Information

Plant: JANSSEN RESEARCH & DEVELOPMENT LLC/LOWER GWYNEDD

Location: 46 Montgomery County 46934 Lower Gwynedd Township

SIC Code: 8731 Services - Commercial Physical Research

Responsible Official

Name: DAVID LINK

Title: MGR-EHS & SUSTAINABILITY

Phone: (215) 628 - 7116 Email: dlink@its.jnj.com

**Permit Contact Person** 

Name: JOHN EVES

Title: STAFF EHS & S SPECIALIST

Phone: (215) 628 - 5160 Email: JEves1@its.jnj.com

[Signature]

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAMMANAGER



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

Source	ID Source Name	Capacity	Throughput	Fuel/Material
033	BOILER 3	25.100	MMBTU/HR	
		179.500	Gal/HR	#2 Oil
		24.600	MCF/HR	Natural Gas
034	BOILER 4 CLEAVER BROOKS	25.100	MMBTU/HR	
		24.600	MCF/HR	Natural Gas
		179.500	Gal/HR	#2 Oil
035 BRYAN BOILER 1 - 15.00 MMBTU/HR		15.000	MMBTU/HR	
		107.000	Gal/HR	#2 Oil
		14.700	MCF/HR	Natural Gas
036 BRYAN BOILER 2 - 15.00 MMBTU/HR		15.000	MMBTU/HR	
		107.000	Gal/HR	#2 Oil
		14.700	MCF/HR	Natural Gas
037 BRYAN BOILER 3 - 15.00 MMBTU/HR		15.000	MMBTU/HR	
		107.000	Gal/HR	#2 Oil
		14.700	MCF/HR	Natural Gas
038 BOILER 1A (21 CUP)	BOILER 1A (21 CUP)	20.412	MMBTU/HR	
		20.010	MCF/HR	Natural Gas
		145.800	Gal/HR	#2 Oil
039	BOILER 2A (21 CUP)	20.412	MMBTU/HR	
		20.010	MCF/HR	Natural Gas
		145.800	Gal/HR	#2 Oil
113	DIESEL EMERGENCY GENERATOR 1000 KW	72.200	Gal/HR	Diesel Fuel
116	CUMMINS DIESEL 1,500-EKW EMERGENCY GENERATOR SET	103.600	Gal/HR	Diesel Fuel
118	NATURAL GAS GENERATOR (3.8 MW)	35,444.000	CF/HR	Natural Gas
119	DIESEL EMERGENCY GENERATOR (750-KW) (BLDG. 42)	52.700	Gal/HR	Diesel Fuel
121	DIESEL FIRE PUMPS (2)		N/A	Diesel Fuel
122	NG FIRED EMER. GEN. (1,468 HP)	9.810	MCF/HR	Natural Gas
123	1,000-EKW EMERGENCY GENERATOR SET (BUILDING 29)	9.903	MCF/HR	Natural Gas
124	TEMP. (RENTAL) DIESEL 2,000-EKW EMERGENCY GENERATOR SETS (2)	270.000	Gal/HR	Diesel Fuel
C116A	1,500-EKW EMERGENCY GENERATOR SET SCR SYSTEM			
C118	SCR ON 118 GENERATOR			
C118A	CO OXIDATION CATALYST WITH STEAM BOILER ON 118 GENERATOR			
FML01	NATURAL GAS			
FML08	2.500-GAL DIESEL FUEL/NO. 2 FUEL OIL ABOVEGROUND STORAGE TNK			
FML11	20,000 GAL DIESEL AST (DIESEL 021A)			
FML12	DIESEL TANK 020A			
FML13	TEMP EMER GENSET 1,250-GAL DIESEL FUEL SUB-BASE STOR TKS (2)			
FML14	DIESEL FIRE PUMPS DIESEL FUEL			

DEP Auth ID: 1529366

DEP PF ID: 482978

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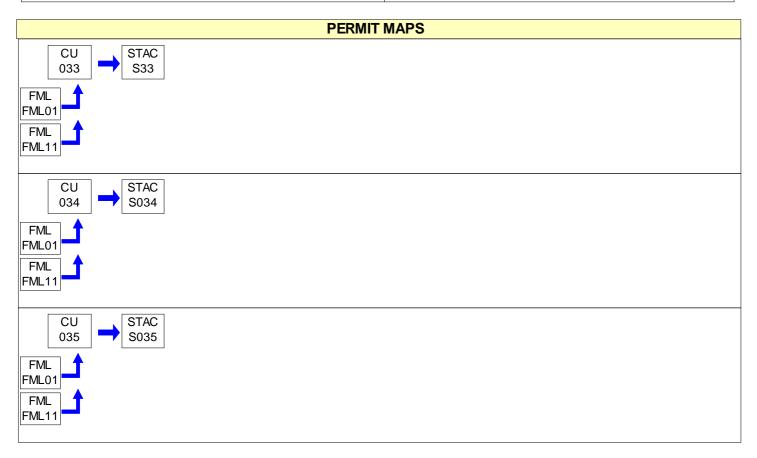






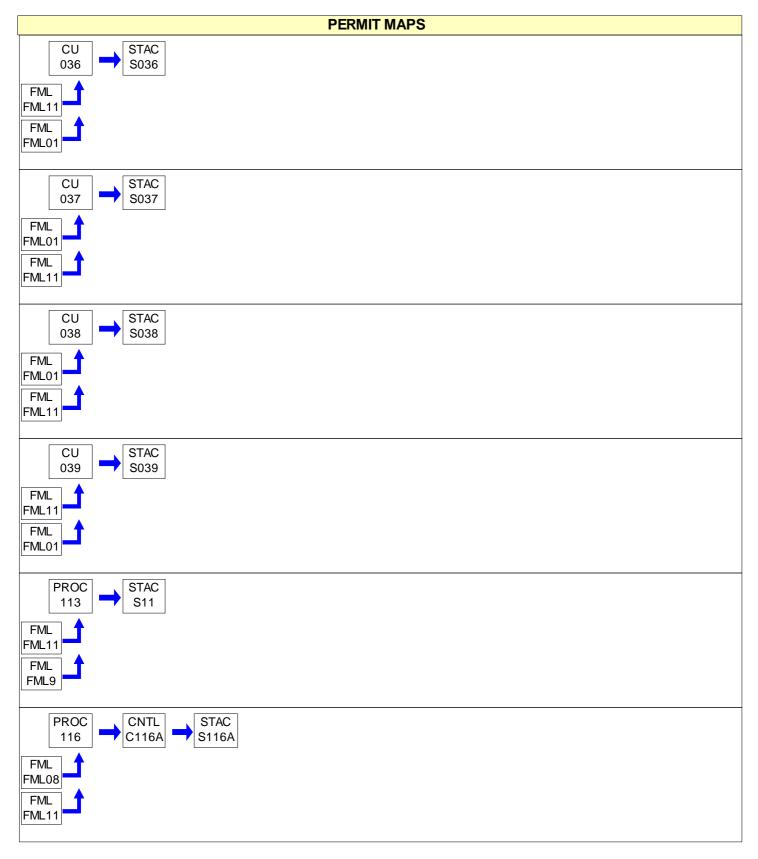
# SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
	ABOVEGROUND STORAGE TANKS (2)		
FML9	DIESEL TANK (19A)		
S034	SOURCE 034 STACK		
S035	BOILER 035 STACK		
S036	BOILER 036 STACK		
S037	BOILER 037 STACK		
S038	STACK FOR BOILER 1A		
S039	STACK FOR BOILER 2A		
S11	SOURCE 113 STACK		
S116A	1,500-EKW EMERGENCY GENERATOR SET SCR SYSTEM STACK		
S118	SOURCE 118 STACK		
S119	STACK FOR EMERGENCY GENERATOR (750 KW)		
S121	FIRE PUMPS (2) STACK		
S122	SOURCE 122 STACK		
S123	1,000-EKW EMERGENCY GENERATOR SET (BUILDING 29) STACK		
S124	TEMP. (RENTÁL) DIESEL 2,000-EKW EMER GENERATOR SETS STKS (2)		
S33	SOURCE 033 STACK		



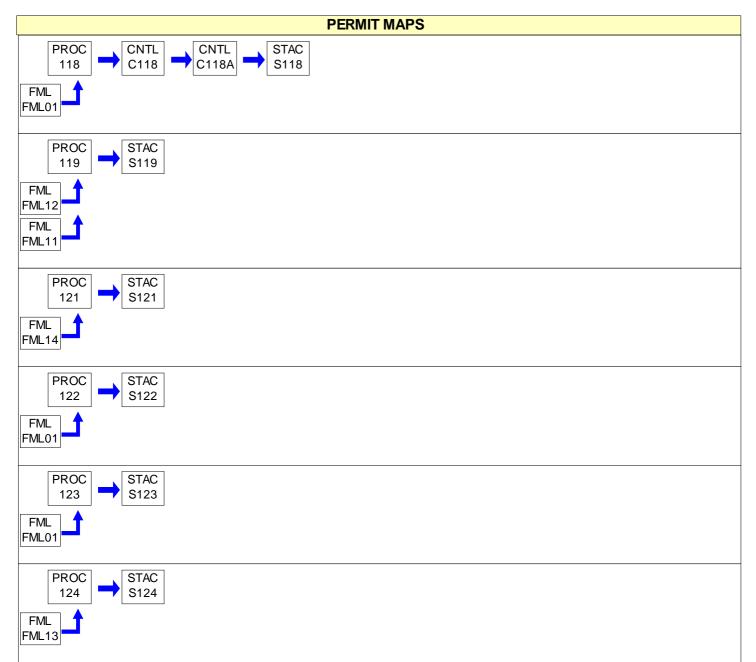
















#001 [25 Pa. Code § 121.1]

**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 Air Pollution Control Act (35 P.S. §§ 4001-4015).

#003 [25 Pa. Code § 127.512(c)(4)]

**Property Rights** 

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

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

## **Permit Expiration**

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

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

#### **Permit Renewal**

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

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

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

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





the Department.

(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.

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

## **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. Apperson may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

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

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

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.







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

## **Duty to Provide Information**

- (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- (b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

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

## Reopening and Revising the Title V Permit for Cause

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

#### #012 [25 Pa. Code § 127.543]

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

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

#### #013 [25 Pa. Code § 127.522(a)]

#### Operating Permit Application Review by the EPA

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

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

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







#### #014 [25 Pa. Code § 127.541]

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## **Significant Operating Permit Modifications**

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

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

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

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

## **Minor Operating Permit Modifications**

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

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

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

#### #016 [25 Pa. Code § 127.450]

# **Administrative Operating Permit Amendments**

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

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

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

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

#### [25 Pa. Code § 127.512(b)] #017

# **Severability Clause**

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

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

#### **Fee Payment**

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





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

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

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

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

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

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







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

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

#### **Reactivation of Sources**

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

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

#### Circumvention

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







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

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

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

#### **Submissions**

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

Regional Air Program Manager

PA Department of Environmental Protection

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

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

Enforcement & Compliance Assurance Division Air, RCRA and Toxics Branch (3ED21) Four Penn Center 1600 John F. Kennedy Boulevard Philadelphia, PA 19103-2852

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

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

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

# Sampling, Testing and Monitoring Procedures

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

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

# **Recordkeeping Requirements**

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







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

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

# **Reporting Requirements**

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

## #026 [25 Pa. Code § 127.513]

#### **Compliance Certification**

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





#### #027 [25 Pa. Code § 127.3]

46-00027

## **Operational Flexibility**

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

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

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

## **Risk Management**

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







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

### #029 [25 Pa. Code § 127.512(e)]

## Approved Economic Incentives and Emission Trading Programs

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

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

## **Permit Shield**

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

#### #031 [25 Pa. Code §135.3]

#### Reporting

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

#### #032 [25 Pa. Code §135.4]

## **Report Format**

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





#### I. RESTRICTIONS.

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

## # 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

- (a) No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:
  - (1) Construction or demolition of buildings or structures.
  - (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations, as specified in 25 Pa. Code § 129.14.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) The emissions are of minor significance with respect to causing air pollution; and
- (ii) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

## # 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 25 Pa. Code § 123.1(a) (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.

# # 006 [25 Pa. Code §123.42]

## **Exceptions**

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions).







#### # 007 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The facility-wide emissions shall not exceed the following limits, calculated monthly, and as a 12-month rolling sum:

- (a) Nitrogen Oxides (NOx): 65.77 tons per year;
- (b) Carbon Monoxide (CO): 89.75 tons per year; and
- (c) Hazardous Air Pollutants (HAP): 5.09 tons per year.

## # 008 [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.
- (g) A fire set solely for cooking food.

#### TESTING REQUIREMENTS.

#### # 009 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including: determining the correct emission fee; whether a malfunction has occurred; or determining compliance with any applicable regulation.

#### # 010 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit/Plan Approval, 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).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, 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.

#### MONITORING REQUIREMENTS.

#### [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.

## [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.511 (if TVOP)]







- (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.

## IV. RECORDKEEPING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

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

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.

#### # 014 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

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

The permittee shall keep a record of the following facility wide emissions calculated monthly and 12-month rolling sum:

- (a) Nitrogen Oxides (NOx);
- (b) Carbon Monoxide (CO); and
- (c) Hazardous Air Pollutants (HAP)

## # 015 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is 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 record sufficient data and calculations so that compliance with the conditions in this Title V Permit can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

[Compliance with the requirement in this streamlined permit condition assures compliance with the presumptive RACT requirements found in 25 Pa. Code §§ 129.115(f).]

#### REPORTING REQUIREMENTS.

#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.7(b), 63.10(b)(2)(ii) and (iv)(B), 63.6655(a)(2) and (5), and 63.11205(a); and 25 Pa. Code Chapter 122 and §§ 127.35(b) and 127.511(c)(2).]

- (a) The permittee shall report malfunctions, emergencies, or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility, which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly-designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency, or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department by telephone at 484-250-5920, as well as to the County Emergency Management Agency by telephone, within 1 hour after the discovery of the malfunction, emergency, or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies, or incidents of excess emissions to the Department within 3 business days of the telephone report.
- (c) The report shall describe the following:
  - (1) The name, permit or authorization number, and location of the facility.
  - (2) The nature and cause of the malfunction, emergency, or incident.
  - (3) The date and time when the malfunction, emergency, or incident was first observed.
  - (4) The expected duration of the malfunction or incident of excess emissions.
  - (5) The estimated rate of emissions.
- (6) The corrective actions or preventative measures taken to minimize emissions, in accordance with Condition # 022, Section C, of this permit, including any corrective action(s) taken to restore malfunctioning equipment to its normal or usual manner of operation.
- (d) Any malfunction, emergency, or incident of excess emissions that is not subject to the notice requirements specified in (b), above, shall be reported to the Department by telephone at 484-250-5920 within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within 5 business days of discovery. The report shall contain the information listed in (c)(1)-(6), above, and any permit-specific malfunction reporting requirements.
- (e) During an emergency, an owner or operator may continue to operate the source at their discretion, provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements, in accordance with (b)-(d), above, as applicable, including any permit-specific malfunction reporting requirements.



- (f) Reports regarding malfunctions, emergencies, or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulting from a malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

## # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this 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 #26 of section B of this permit. The annual certificate of compliance shall be submitted to the DEP electronically, and to EPA Region III in electronic form at the following email address: R3\_APD\_Permits@epa.gov. The subject line shall read: "TVOP No. 46-00027, Janssen Research & Development, LLC."
- (b) A semi-annual deviation report to DEP, 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).

## # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 40 CFR Part 68.]

- (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 threshold quantity at a 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 40 CFR § 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 this 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 this facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If this 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 this 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 the permittee fails to submit a compliance schedule or fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

#### # 020 [25 Pa. Code §135.21]

#### **Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement showing the actual emissions of NOx and VOC emissions for the preceding calendar year. Additionally, a description of the method used to calculate the emissions shall be included. The statement shall contain a certification by a company official or plant manager that the information contained in the statement is true and accurate.

#### VI. WORK PRACTICE REQUIREMENTS.

## # 021 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

A person responsible for any source specified in 25 Pa. Code § 123.1 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.
- (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.

# # 022 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall comply with all of the existing requirements of any particular plan approval, unless specifically revised in this operating permit. The provisions in the appropriate plan approval shall be construed to supersede any contrary provisions in this operating permit.

# # 023 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.6(e)(1)(i)–(ii) and 63.11205(a), and 25 Pa. Code §§ 127.35 and 127.444.]

The permittee shall ensure that the source(s) and air pollution control device(s) listed in this permit, as well as the associated monitoring equipment, are operated and maintained in a manner consistent with good safety, operating and maintenance, and air pollution control practices, as applicable, for minimizing emissions, and in accordance with the manufacturers' specifications.

[Compliance with the requirement in this streamlined permit condition assures compliance with the presumptive RACT requirements found in 25 Pa. Code §§ 129.112(c). This is applicable to:

- Sources 035, 036, & 037 (Bryan Boilers), as specified in § 129.112(c)(4).
- Sources 113, 116, 119, & 122 (emergency generator engines), as specified in § 129.112(c)(1).
- Source 121 (Fire Pump Engines), as specified in § 129.112(c)(10).]







# # 024 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition # 019(g), 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 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.

## 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 \*\*\*



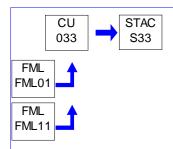


Source ID: 033 Source Name: BOILER 3

> Source Capacity/Throughput: 25.100 MMBTU/HR

> > 179.500 Gal/HR #2 Oil

24.600 MCF/HR Natural Gas



#### RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall ensure that emission into the outdoor atmosphere of PM from this boiler occurs in such a manner that the rate of the emission does not exceed 0.4 lb/mmBtu heat input.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.1.]

- (a) The permittee shall ensure that the emission into the outdoor atmosphere of NOx from this boiler occurs in such a manner that the concentration of the emission does not exceed either of the following:
  - (1) 30 ppmv, dry basis, corrected to 3% oxygen (O2), or 0.036 lbs/mmBtu heat input, when consuming natural gas.
  - (2) 90 ppmv, dry basis, corrected to 3% O2, or 0.11 lbs/mmBtu heat input, when consuming No. 2 fuel oil.
- (b) The permittee shall ensure that the emission into the outdoor atmosphere of CO from this boiler occurs in such a manner that the concentration of the emission does not exceed 300 ppmv, dry basis, corrected to 3% O2.

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate this boiler so that the following emission limitations are not exceeded:

- (a) carbon monoxide (CO): 9.03 lb/hr and 35.84 tpy;
- (b) nitrogen oxides (NOx): 3.01 lb/hr and 5.40 tpy;
- (c) particulate matter (PM): 0.36 lb/hr and 1.35 tpy;
- (d) sulfur oxides (SOx): 5.12 lb/hr and 3.51 tpy; and
- (e) volatile organic compounds (VOCs): 0.10 lb/hr and 0.41 tpy,

where 'tpy' is tons per year determined on a twelve (12) month rolling basis.

## Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 123.22(e)(2) and 127.512(h).]

(a) The permittee shall ensure that natural gas and No. 2 fuel oil, to which there has been no reclaimed or waste oil or other waste materials added, are the only fuels consumed by this boiler.





(b) The sulfur content of the No. 2 fuel oil consumed by the boiler shall not exceed 15 ppm (0.0015%, by weight), except as specified in 25 Pa. Code § 123.22(e)(2)(ii)–(iii).

[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.42c(d) and 25 Pa. Code § 123.22(e)(1). Compliance with (b), above, assures that the permittee will not be subject to the requirements of 40 CFR § 60.43c(e)(1).]

# Throughput Restriction(s).

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit No. 2 fuel oil usage for this boiler to 241,900 gallons in any 12-month rolling period.

#### 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.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the amount and type of each fuel consumed by this boiler on a monthly basis, using non-resettable natural gas and No. 2 fuel oil meters.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, using a Department-approved method.

## IV. RECORDKEEPING REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.48c(g)(2) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the amount and type of each fuel consumed by this boiler on a monthly and 12-month rolling basis.

[Compliance with this condition and Conditions # 004 and 006, Section D (under Source ID 033), of this permit, assures that the permittee will not be subject to the PM emission limit indicated in 40 CFR Part 63, Subpart JJJJJJ, Table 1, pursuant to 40 CFR § 63.11210(f).]

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for this boiler (including the flue gas recirculation equipment):

- (a) inspections performed;
- (b) maintenance performed;
- (c) any deficiencies noted; and
- (d) any corrective actions taken.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.93(b)(3).]







The permittee shall record each adjustment conducted (referring to annual tune-ups) for this boiler in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NOx and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.115(i).]

# # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, calculated using a Department-approved method.

## # 012 [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 derived from 25 Pa. Code Chapter 122.]

The permittee shall maintain records of each fuel supplier certification submittal indicating the sulfur content or maximum sulfur content of the No. 2 fuel oil consumed by this boiler, in accordance with 40 CFR § 60.48c(e).

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

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

What are my notification, reporting, and recordkeeping requirements?

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall maintain the following records for this boiler:
- (1) a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ, and all documentation supporting any Initial Notification or Notification of Compliance Status submitted, as required in 40 CFR § 63.10(b)(2)(xiv);
- (2) the following records to document conformance with the work practices and management practices required by 40 CFR §§ 63.11214 and 63.11223:
- (i) identification of the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (ii) a copy of the energy assessment report.
- (3) records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment; and
- (4) records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR § 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.
- (b) The permittee shall maintain records in a form suitable and readily available for expeditious review. The permittee shall keep each record for 5 years following the date of each recorded action. The permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years.

## V. REPORTING REQUIREMENTS.

## # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.10(a)(5) and 63.11225(b)(1)–(3), and 25 Pa.







Code § 127.35.]

- (a) The permittee shall prepare, by April 1 of the year after a tune-up has been completed for this boiler, and submit to the Department upon request, a compliance certification report for the previous calendar year containing the following information:
  - (1) company name and address; and
- (2) statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification; and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
  - (i) "This facility complies with the requirements in 40 CFR § 63.11223 to conduct a 5-year tune-up of each boiler";
- (ii) "This facility complies with the requirement in 40 CFR §§ 63.11214(d) and 63.11223(g) to minimize the boilers' time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturers' recommended procedures or procedures specified for a boiler of similar design if manufacturers' recommended procedures are not available."
- (b) If the boiler experiences any deviations from the applicable requirements during the reporting period, include the following in the compliance certification report in (a), above, and submit to the Department by April 1st:
  - (1) a description of deviations;
  - (2) the time periods during which the deviations occurred; and
- (3) the corrective actions.

# 015 [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 derived from 25 Pa. Code Chapter 122.]

- (a) The permittee shall submit records of the fuel supplier certifications for the No. 2 fuel oil consumed by this boiler, including a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the No. 2 fuel oil combusted during the reporting period, pursuant to 40 CFR § 60.48c(e)(11).
- (b) Each fuel supplier certification shall include the following information, pursuant to 40 CFR § 60.48c(f)(1):
  - (1) the name of the fuel supplier;
  - (2) a statement from the oil supplier that the oil complies with the specifications for No. 2 fuel oil in ASTM D396; and
- (3) the sulfur content or maximum sulfur content of the No. 2 fuel oil.
- (c) Reports shall be submitted to EPA and the Department on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period.
- (d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR § 60.48c(d), (e)(11), and (j), and shall be postmarked by the 30th day following the end of the reporting period.
- (e) In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

[Compliance with this streamlined permit condition assures compliance with 40 CFR §§ 60.42c(h)(1) and 60.46c(e), and 25 Pa. Code § 139.16.]

## VI. WORK PRACTICE REQUIREMENTS.

# 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain non-resettable natural gas and No. 2 fuel oil meters for this boiler.





# # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.93(b)(2).]

The company shall conduct an annual adjustment or tune-up for this boiler. This shall include, but is not limited to, the following:

- (a) inspect, adjust, clean, or replace the fuel burning equipment, including the burners, and move parts necessary for proper operation as specified by the manufacturer;
- (b) inspect the flame pattern or characteristics, and make necessary adjustments to minimize total emissions of NOx, and to minimize the emissions of CO to the most practicable extent; and
- (c) inspect the air-to-fuel ratio control system and make the necessary adjustments to ensure proper calibration and operation as specified by the manufacturer.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.112(b)(1)(ii).]

## # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.11201(b) and 63.11223(a)–(c), and 25 Pa. Code § 127.35.]

- (a) The permittee shall conduct separate tune-ups of this boiler every 5 years, as follows, while consuming natural gas and No. 2 fuel oil:
- (1) as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 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 (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months 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 as follows:
- (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; and
  - (ii) a description of any corrective actions taken as a part of the tune-up of the boiler.
- (iii) The type(s) and amount(s) of fuel(s) used over the 12 months prior to the tune-up of the boiler. 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.
- (b) The permittee shall conduct each 5-year tune-up no more than 61 months after the previous tune-up.

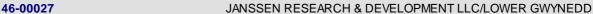
#### VII. ADDITIONAL REQUIREMENTS.

## # 019 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

This source consists of a natural gas- (primary fuel) and No. 2 fuel oil- (auxiliary fuel) fired boiler, model no. CEW-200-600-150, manufactured by Cleaver-Brooks. The boiler is rated at 25.1 mmBtu/hr heat input (600 boiler hp), and is equipped with low-NOx burners, flue gas recirculation, and an oxygen trim system.







# 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) This boiler is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart Dc, and Part 63, Subpart JJJJJJ. The boiler is an existing source pursuant to 40 CFR § 63.11194(b).
- (b) In accordance with 40 CFR §§ 60.4 and 63.13, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

# 021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.93(b)(5).]

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

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





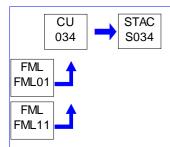


Source ID: 034 Source Name: BOILER 4 CLEAVER BROOKS

Source Capacity/Throughput: 25.100 MMBTU/HR

24.600 MCF/HR Natural Gas

179.500 Gal/HR #2 Oil



## I. RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall ensure that emission into the outdoor atmosphere of PM from this boiler occurs in such a manner that the rate of the emission does not exceed 0.4 lb/mmBtu heat input.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.1.]

- (a) The permittee shall ensure that the emission into the outdoor atmosphere of NOx from this boiler occurs in such a manner that the concentration of the emission does not exceed either of the following:
  - (1) 30 ppmv, dry basis, corrected to 3% O2, when consuming natural gas.
  - (2) 139 ppmv, dry basis, corrected to 3% O2, when consuming No. 2 fuel oil.
- (b) The permittee shall ensure that the emission into the outdoor atmosphere of CO from this boiler occurs in such a manner that the concentration of the emission does not exceed 400 ppmv, dry basis, corrected to 3% O2.

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall limit the NOx emissions from this boiler to 111.84 pounds per day, calculated as a 24-hour sum.
- (b) The permittee shall limit the aggregate NOx emissions from this boiler and Source 116 (Emergency Generator) to 8.5 tons per year, calculated as a 12-month rolling sum.
- (c) The permittee shall limit the aggregate VOC emissions from this boiler and Source 116 (Emergency Generator) to 2.03 tons per year, calculated as a 12-month rolling sum.

## Fuel Restriction(s).

# # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 123.22(e)(2) and 127.512(h).]

- (a) The permittee shall ensure that natural gas and No. 2 fuel oil, to which there has been no reclaimed or waste oil or other waste materials added, are the only fuels consumed by this boiler.
- (b) The sulfur content of the No. 2 fuel oil consumed by the boiler shall not exceed 15 ppm (0.0015%, by weight), except as specified in 25 Pa. Code § 123.22(e)(2)(ii)–(iii).







[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.42c(d) and 25 Pa. Code § 123.22(e)(1). Compliance with (b), above, assures that the permittee will not be subject to the requirements of 40 CFR § 60.43c(e)(1).]

## Throughput Restriction(s).

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the No. 2 fuel oil usage in this boiler to 193,860 gallons in any 12-month rolling period.

#### TESTING REQUIREMENTS. Ш.

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

#### MONITORING REQUIREMENTS. III.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the amount and type of each fuel consumed by this boiler on a monthly basis, using nonresettable natural gas and No. 2 fuel oil meters.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, using a Department-approved method.

## IV. RECORDKEEPING REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.48c(g)(2) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the amount and type of each fuel consumed by this boiler on a monthly and 12month rolling basis.

[Compliance with this condition and Conditions # 004 and 006, Section D (under Source ID 034), of this permit, assures that the permittee will not be subject to the PM emission limit indicated in 40 CFR Part 63, Subpart JJJJJJ, Table 1, pursuant to 40 CFR § 63.11210(f).]

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for this boiler (including the flue gas recirculation equipment):

- (a) inspections performed;
- (b) maintenance performed;
- (c) any deficiencies noted; and
- (d) any corrective actions taken.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall maintain a worst-case emission calculation to demonstrate compliance with Condition # 003(a), Section D (under Source ID 034), of this permit.
- (b) The permittee shall maintain records of the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly







and 12-month rolling basis, calculated using a Department-approved method.

## # 011 [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 derived from 25 Pa. Code Chapter 122.]

The permittee shall maintain records of each fuel supplier certification submittal indicating the sulfur content or maximum sulfur content of the No. 2 fuel oil consumed by this boiler, in accordance with 40 CFR § 60.48c(e).

## # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall maintain the following records for this boiler:
- (1) a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ, and all documentation supporting any Initial Notification or Notification of Compliance Status submitted, as required in 40 CFR § 63.10(b)(2)(xiv);
- (2) the following records to document conformance with the work practices and management practices required by 40 CFR §§ 63.11214 and 63.11223:
- (i) identification of the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (ii) a copy of the energy assessment report.
- (3) records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment; and
- (4) records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR § 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.
- (b) The permittee shall maintain records in a form suitable and readily available for expeditious review. The permittee shall keep each record for 5 years following the date of each recorded action. The permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years.

#### # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(i).]

The permittee shall record each adjustment conducted (referring to annual tune-ups) for this boiler in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NOx and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.

## V. REPORTING REQUIREMENTS.

## # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.10(a)(5) and 63.11225(b)(1)–(3), and 25 Pa.







Code § 127.35.]

- (a) The permittee shall prepare, by April 1 of the year after a tune-up has been completed for this boiler, and submit to the Department upon request, a compliance certification report for the previous calendar year containing the following information:
  - (1) company name and address; and
- (2) statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification; and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
  - (i) "This facility complies with the requirements in 40 CFR § 63.11223 to conduct a 5-year tune-up of each boiler";
- (ii) "This facility complies with the requirement in 40 CFR §§ 63.11214(d) and 63.11223(g) to minimize the boilers' time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturers' recommended procedures or procedures specified for a boiler of similar design if manufacturers' recommended procedures are not available."
- (b) If the boiler experiences any deviations from the applicable requirements during the reporting period, include the following in the compliance certification report in (a), above, and submit to the Department by April 1st:
  - (1) a description of deviations;
  - (2) the time periods during which the deviations occurred; and
- (3) the corrective actions.

# 015 [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 derived from 25 Pa. Code Chapter 122.]

- (a) The permittee shall submit records of the fuel supplier certifications for the No. 2 fuel oil consumed by this boiler, including a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the No. 2 fuel oil combusted during the reporting period, pursuant to 40 CFR § 60.48c(e)(11).
- (b) Each fuel supplier certification shall include the following information, pursuant to 40 CFR § 60.48c(f)(1):
  - (1) the name of the fuel supplier;
  - (2) a statement from the oil supplier that the oil complies with the specifications for No. 2 fuel oil in ASTM D396; and
- (3) the sulfur content or maximum sulfur content of the No. 2 fuel oil.
- (c) Reports shall be submitted to EPA and the Department on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period.
- (d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR § 60.48c(d), (e)(11), and (j), and shall be postmarked by the 30th day following the end of the reporting period.
- (e) In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

[Compliance with this streamlined permit condition assures compliance with 40 CFR §§ 60.42c(h)(1) and 60.46c(e), and 25 Pa. Code § 139.16.]

## VI. WORK PRACTICE REQUIREMENTS.

# 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain non-resettable natural gas and No. 2 fuel oil meters for this boiler.





# # 017 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.11201(b) and 63.11223(a)–(c), and 25 Pa. Code § 127.35.]

- (a) The permittee shall conduct separate tune-ups of this boiler every 5 years, as follows, while consuming natural gas and No. 2 fuel oil:
- (1) as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 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 (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months 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 as follows:
- (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; and
  - (ii) a description of any corrective actions taken as a part of the tune-up of the boiler.
- (iii) The type(s) and amount(s) of fuel(s) used over the 12 months prior to the tune-up of the boiler. 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.
- (b) The permittee shall conduct each 5-year tune-up no more than 61 months after the previous tune-up.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.112(b)(1)(ii).]

## VII. ADDITIONAL REQUIREMENTS.

# # 018 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

This source consists of a natural gas- (primary fuel) and No. 2 fuel oil- (auxiliary fuel) fired boiler, model no. CEW-200-600-150, manufactured by Cleaver-Brooks. The boiler is rated at 25.1 mmBtu/hr heat input (600 boiler hp), and is equipped with low-NOx burners, flue gas recirculation, and an oxygen trim system.

## # 019 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) This boiler is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart Dc, and Part 63, Subpart JJJJJJ. The boiler is an existing source pursuant to 40 CFR § 63.11194(b).
- (b) In accordance with 40 CFR §§ 60.4 and 63.13, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

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



# 46-00027



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

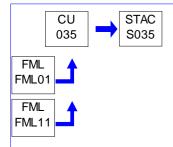
Source ID: 035 Source Name: BRYAN BOILER 1 - 15.00 MMBTU/HR

Source Capacity/Throughput: 15.000 MMBTU/HR

107.000 Gal/HR #2 Oil

14.700 MCF/HR Natural Gas

Conditions for this source occur in the following groups: BRYAN BOILERS



#### I. RESTRICTIONS.

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

## II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

## IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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

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







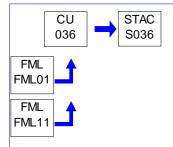
Source ID: 036 Source Name: BRYAN BOILER 2 - 15.00 MMBTU/HR

Source Capacity/Throughput: 15.000 MMBTU/HR

107.000 Gal/HR #2 Oil

14.700 MCF/HR Natural Gas

Conditions for this source occur in the following groups: BRYAN BOILERS



#### I. RESTRICTIONS.

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

## II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

## IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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

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







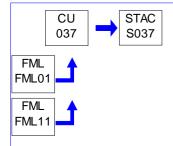
Source ID: 037 Source Name: BRYAN BOILER 3 - 15.00 MMBTU/HR

Source Capacity/Throughput: 15.000 MMBTU/HR

107.000 Gal/HR #2 Oil

14.700 MCF/HR Natural Gas

Conditions for this source occur in the following groups: BRYAN BOILERS



#### I. RESTRICTIONS.

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

## II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

## IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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

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



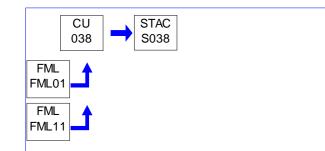


Source ID: 038 Source Name: BOILER 1A (21 CUP)

Source Capacity/Throughput: 20.412 MMBTU/HR

20.010 MCF/HR Natural Gas 145.800 Gal/HR #2 Oil

Conditions for this source occur in the following groups: CLEAVER BROOKS BOILERS



#### I. RESTRICTIONS.

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

## II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

## IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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

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



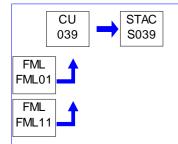


Source ID: 039 Source Name: BOILER 2A (21 CUP)

> Source Capacity/Throughput: 20.412 MMBTU/HR

> > 20.010 MCF/HR Natural Gas #2 Oil 145.800 Gal/HR

Conditions for this source occur in the following groups: CLEAVER BROOKS BOILERS



#### RESTRICTIONS.

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

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

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

#### III. MONITORING REQUIREMENTS.

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

## RECORDKEEPING REQUIREMENTS.

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

#### REPORTING REQUIREMENTS.

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

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

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

#### VII. ADDITIONAL REQUIREMENTS.

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

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

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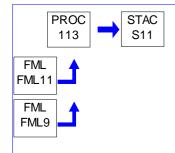
## 46-00027



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

Source ID: 113 Source Name: DIESEL EMERGENCY GENERATOR 1000 KW

Source Capacity/Throughput: 72.200 Gal/HR Diesel Fuel



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.21] General

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

## # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4202(a)(2) and 60.4205(b) and Part 1039, Appendix I; and 25 Pa. Code Chapter 122.]

The permittee shall ensure that emission into the outdoor atmosphere of the following pollutants from the engine of this emergency generator set do not exceed the following emission standards and rates:

Pollutant(s)	g/bkW-hr (g/bhp-hr)	Lbs/hr	Tons/yr
СО	3.5 (2.61)	2.16	0.54
HCs	, ,	0.23	0.057
NOx		12.91	3.23
NOx + NMHCs	6.4 (4.77)		
PM	0.20 (0.15)	0.36	0.090

HCs = Hydrocarbons.

NMHCs = Non-methane hydrocarbons.

PM = Particulate matter.

Tons/yr = Tons per 12-month rolling period, calculated monthly.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.13(c).]

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine

The permittee must operate and maintain the engine to achieve the emission standards specified above over the entire life of the engine.





## Fuel Restriction(s).

# 004 [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

Diesel fuel used in this engine must meet the following per-gallon standards:

- (a) sulfur content: 15 ppm maximum; and
- (b) cetane index or aromatic content, as follows:
- (1) a minimum cetane index of 40: or
- (2) a maximum aromatic content of 35 volume percent.

[Compliance with (a), above, assures compliance with 25 Pa. Code § 123.21.]

## Operation Hours Restriction(s).

## # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4211(f)(1)–(3) and 25 Pa. Code Chapter 122.]

The permittee shall ensure that the engine of this emergency generator set is operated in compliance with the following operating hours restrictions:

- (a) A total operating time of less than or equal to 500 hours per year, calculated monthly as a 12-month rolling sum.
- (b) A total operating time of less than or equal to 50 hours per calendar year for non-emergency situations, except that the following operations are prohibited:
  - (1) Peak shaving.
  - (2) Demand response.
- (3) Supplying power to an electric grid to generate income, or otherwise supplying power as part of a financial arrangement with another entity.
  - (c) A total operating time of less than or equal to 100 hours per calendar year for the following purposes:
    - (1) Any maintenance, including readiness testing and tune-ups.
    - (2) The non-emergency situations indicated in (b), above (i.e., for less than or equal to 50 hours per calendar year).

[Compliance with this permit condition assures that the engine is considered an emergency engine in accordance with the provisions of 40 CFR Part 60, Subpart IIII, as vacated in part on May 1, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit.]

## 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 viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F;
- (3) tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)-(15); and
- (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 sulfur content in the fuel is less than 15 ppmw, is obtained each time a fuel oil delivery is made.

#### III. MONITORING REQUIREMENTS.

# 007 [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?
The engine must be equipped with a non-resettable hour meter.

#### IV. RECORDKEEPING REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the following records for this emergency generator set:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation:
  - (1) The hours of operation for each type of operation on an operating day and calendar year basis.
  - (2) The total hours of operation, on a monthly and 12-month rolling basis.
- (c) The amount of fuel consumed by the engine of the emergency generator set on a monthly basis.
- (d) NOx, CO, NMHC, and PM emission calculations on a monthly basis and on a 12-month rolling sum basis; and
- (e) The fuel sulfur content.

#### 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.

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR 60, Subpart IIII.]

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 60.4211(f), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines.

# 010 [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 must

- (a) operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (b) change only those emission-related settings that are permitted by the manufacturer;







- (c) meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply; and
- (d) install and configure the engine according to the manufacturer's emission-related specifications.

#### VII. ADDITIONAL REQUIREMENTS.

### # 011 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) This source consists of an emergency generator set, model no. 1000DQFAD, manufactured by Cummins Power Generation. The emergency generator set is rated at 1,000 ekW power output (standby).
- (b) The emergency generator set is equipped with a four-stroke, V-12, diesel fuel-fired, stationary reciprocating internal combustion engine, model no. QST30-G5 NR2, manufactured by Cummins, Inc. The engine is rated at 1,482 bhp power output (standby) and has a displacement of 2.53 liters per cylinder.

### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The engine of the emergency generator set is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart IIII. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. These shall be submitted as specified in Condition # 022, Section B, of this permit.

#### # 013 [25 Pa. Code §129.203]

### Stationary internal combustion engines.

On or before October 31 of each year, the permittee shall calculate the difference between the actual NOx emissions from, and the allowable NOx emissions for, the engine of this emergency generator set during the ozone season.

#### # 014 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

The permittee shall calculate the allowable NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values:

- (a) The hours of operation for the emergency generator set during the ozone season.
- (b) The maximum rated power output (bhp) for the engine indicated in Condition # 011(b), Section D (under Source ID 113), of this permit.
- (c) The emission rate of 2.3 g/bhp-hr.

#### # 015 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.204(b)(2)(ii) and (iv).]

- (a) The permittee shall calculate the actual NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values for the emergency generator set/engine:
  - (1) The hours of operation for the emergency generator set during the ozone season.
- (2) The maximum hourly NOx emission rate restriction for the engine indicated in Condition # 002, Section D (under Source ID 113), of this permit.
- (b) As an alternative to the calculation procedure in (a), above, the permittee may calculate the actual NOx emissions from the engine of the emergency generator set during the ozone season by using an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternative procedure does not underestimate actual NOx emissions. In conjunction with the alternative procedure for calculating actual NOx emissions, the permittee may also request an adjustment to the allowable NOx emissions calculation procedure specified in Condition # 014, Section D (under Source ID 113), of this permit. The adjustment to the





allowable NOx emissions calculation procedure shall be based upon the same emissions testing and correlations with operating parameters proposed in the alternative calculation procedure for actual NOx emissions, and shall not overestimate allowable NOx emissions. The alternative calculation and recordkeeping procedure(s) must be approved by the Department, in writing, prior to its implementation.

## [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 97, Subparts AAAAA, EEEEE, and GGGGG, and 25 Pa. Code § 129.204(c) and (e)-(f).]

- (a) The permittee shall surrender to the Department one Clean Air Interstate Rule (CAIR) NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR §§ 96.102 and 96.302, respectively, for each ton of NOx by which the combined actual NOx emissions from the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during each ozone season exceed the allowable NOx emissions from the same sources during the same period. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of NOx allowances to surrender, any remaining fraction of a ton of NOx equal to or greater than 0.50 tons shall be deemed to equal 1 ton, and any fraction of a ton of NOx less than 0.50 tons shall be deemed to equal zero tons.
- (b) On or before November 1 of each year, the permittee shall surrender the NOx allowances required in (a), above, to the Department's designated NOx allowance tracking system account and submit the following information to the Department, in writing:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (c) If the permittee does not comply with (b)(1)–(2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NOx allowances for each NOx allowance that was required to be surrendered in (b)(1)–(2), above. The surrendered NOx allowances may be of current or later year vintage.

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season. Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402 and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

#### # 017 [25 Pa. Code §129.204]

## **Emission accountability.**

- (a) If the combined allowable NOx emissions for the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities (during the same period).
- (b) If the combined allowable NOx emissions for all sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of





actual NOx emissions from the engine of this emergency generator set or any other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility (during the same period).

# 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

The permittee shall comply with the General Provisions in 40 C.F.R. §§ 60.1 through 60.19 as appllicable.

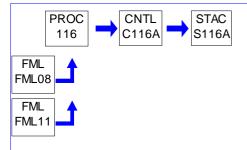
\*\*\* Permit Shield in Effect. \*\*\*





Source ID: 116 Source Name: CUMMINS DIESEL 1,500-EKW EMERGENCY GENERATOR SET

Source Capacity/Throughput: 103.600 Gal/HR Diesel Fuel



#### 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 this source in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

## # 002 [25 Pa. Code §123.21]

### **G**eneral

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

## # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- (a) The permittee shall limit the Nitrogen Oxides (NOx) emissions from this engine to 0.63 tons per year, or less, calculated on a 12-month rolling basis and 1.3 grams per brake horsepower hour, or less, when urea is being injected into the SCR system.
- (b) The permittee shall limit the aggregate VOC emissions from this engine and Source 034 (Boiler #4 Cleaver Brooks) to 2.03 tons per year, calculated on a 12-month rolling basis.
- (c) The permittee shall limit the aggregate NOx emissions from this engine and Source 034 (Boiler #4 Cleaver Brooks) to 8.5 tons per year, calculated as a 12-month rolling sum.

## # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the ammonia slip for the SCR system (Source ID C116A) associated with the engine of this emergency generator set does not exceed 10 ppmv, dry basis.

## Fuel Restriction(s).

# # 005 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall fire this source with diesel fuel or No. 2 fuel oil only, which contains 0.3% sulfur by weight or less.

[Compliance with this condition assures compliance with 25 Pa. Code § 123.21.]

#### # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- (a) The permittee shall fire No. 2 fuel oil or diesel fuel oil only, to which there has been no reclaimed or waste oil or other waste materials added.
- (b) The permittee shall limit the annual fuel usage to 20,720 gallons or less of No. 2 or diesel fuel oil which contains 0.3 percent of sulfur by weight or less.
- (c) The permittee shall operate a non-resettable fuel meter on the engine in order to determine compliance with the above







fuel limitation and in order to determine the actual atmospheric emissions.

## Operation Hours Restriction(s).

#### # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

- (a) As per 40 CFR § 63.6585(f)(3), the emergency engine is not subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, if the operation of this engine meets the requirements specified in 40 CFR § 63.6640(f)(2)(i) and (4)(i).
- (b) As per 40 CFR § 63.6640(f)(2)(i) and (4)(i), in order for the engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the permittee does not operate the engine according to the requirements specified below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines in 40 CFR Part 63, Subpart ZZZZ.
- (1) The permittee may operate the emergency stationary RICE for a maximum of 100 hours per calendar year 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.
- (2) The emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in nonemergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

### Control Device Efficiency Restriction(s).

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that the SCR system (Source ID C116A) associated with the engine of this emergency generator set achieves a minimum NOx destruction efficiency of 85% at all times when urea solution is being injected.

## II. TESTING REQUIREMENTS.

## # 009 [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 viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F;
- (3) tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)-(15); and
- (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 percentage sulfur (or ppm value) in the fuel, is obtained each time a fuel oil delivery is made.





#### MONITORING REQUIREMENTS. III.

#### #010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall calculate on a monthly basis and on a 12-month rolling basis, the generator's emissions of the following pollutants: NOx and VOCs.
- (b) The permittee shall monitor, at least once per shift during which the SCR is operating, the following:
- (1) the flow rate of the urea and water mixture flow rate to the selective catalytic reduction unit; and
- (2) the temperature of the exhaust gas at the inlet of the SCR system catalyst.

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record sufficient data so that compliance with the conditions in this Title V Permit can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request. The records shall include but not be limited to the following information:

- (a) the permittee shall maintain a copy of the manufacturer's specifications for the operation and maintenance of the electric generator, SCR system and any associated air pollution control devices;
- (b) the permittee shall keep records on a monthly basis, calculated as a 12-month rolling sum, of the emissions, identified in Condition # 002, from the electric generator;
- (c) the permittee shall maintain records, on a monthly basis, calculated as a 12-month rolling sum, of the amount of fuel used, in order to demonstrate compliance with the fuel limitations;
- (d) the permittee shall keep the records of the fuel supplier certifications for No. 2 oil and diesel fuel oil to demonstrate compliance with the fuel limitations;
- (e) the permittee shall maintain records of tune-ups, repairs, part replacements, and other maintenance performed in accordance with manufacturer's specifications; and
- (f) the permittee shall maintain records, on a monthly and 12-month rolling sum basis, of the total hours of operation;
- (g) the permittee shall maintain records, on an operating day and calendar year basis, of the type of operation and the hours for each type of operation.
- (h) the permittee shall keep records of the monitoring requirements.

#### [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep all records of the stack test protocol and results of the stack test performed on the engine.

#### 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.

#### # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain the engine of this emergency generator set, as well as the associated SCR system (Source ID C116A), in a manner consistent with good safety, operation and maintenance, and air pollution control practices, and in accordance with the manufacturers' specifications.

#### # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall ensure that all exhaust gas flow from the engine of this emergency generator set is routed through the associated SCR system (Source ID C116A) before exhausting into the outdoor atmosphere.
- (b) The permittee shall operate the SCR system whenever the temperature on the inlet side of the SCR is equal to or greater than 600 °F, or at least once per year for a period of equal to or greater than 1 hour, whichever is more restrictive.





#### # 015 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall operate and maintain a temperature transmitter for the SCR system (Source ID C116A) associated with the engine of this emergency generator set to allow urea to be injected whenever the temperature on the inlet side of the SCR is equal to or greater than 600 °F.

#### # 016 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall use a 30–40% urea solution (in water) as the reducing agent for the SCR system (Source ID C116A) associated with the engine of this emergency generator set, unless the permittee demonstrates that another reducing agent is equally effective and the Department approves of its use.

## [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall operate and maintain a flow meter to indicate the flow rate of urea solution to the SCR system (Source ID C116A) associated with the engine of this emergency generator set. The permittee shall maintain the flow rate of the urea solution (when being injected) within the range of 0.5–11.0 gals/hr.

## [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall comply with the following practices on this engine:

- (a) changing oil and filter every 500 hours of operation or annually;
- (b) inspecting air cleaner every 1,000 hours of operation or annually; and
- (c) inspecting all hoses and belts every 500 hours of operation or annually.

#### # 019 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 63, Subpart ZZZZ, and 25 Pa. Code § 127.35.]

- (a) The permittee shall operate the emergency stationary RICE according to the requirements in the most recent version of 40 CFR § 63.6640(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 63.6640(f), the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ, and must meet all requirements for non-emergency engines.

## VII. ADDITIONAL REQUIREMENTS.

#### # 020 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- (a) This source consists of an emergency generator set, model no. DFLE, manufactured by Onan Corp. The emergency generator set is rated at 1,500 ekW power output (standby).
- (b) The emergency generator set is equipped with a four-stroke, V-16, diesel fuel/No. 2 fuel oil-fired (compression-ignition [CI]) reciprocating internal combustion (IC) engine, model no. KTA50-G9, manufactured by Cummins Engine Co. (model year: 2001). The engine is rated at 2,220 bhp power output (standby) and has a displacement of 3.141 liters per cylinder.
- (c) NOx emissions from the engine are controlled by a SCR system (Source ID C116A), model no. DeNOx-DFLE/1500, manufactured by Steuler Anlagenbau GmbH & Co. KG.

#### [25 Pa. Code §127.441] # 021

## Operating permit terms and conditions.

- (a) The engine of this emergency generator set is subject to, and shall comply with all applicable provisions of, 40 CFR Part 63, Subpart ZZZZ.
- (b) In accordance with 40 CFR § 63.13, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition





# 022(b), Section B, of this permit.

## # 022 [25 Pa. Code §129.203]

### Stationary internal combustion engines.

- (a) 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 period, by October 31 on an annual basis.
- (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 2.3 grams of NOx per brake horsepower-hour.

### # 023 [25 Pa. Code §129.204]

#### Emission accountability.

The permittee shall determine actual emissions of NOx by one of the following:

- (a) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.
- (b) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:
- (1) 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"; or
- (2) 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.
- (c) CEMS data, if the permittee elects to monitor NOx emissions with a CEMS. The permittee 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.
- (d) An alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee 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.

## # 024 [25 Pa. Code §129.204]

#### **Emission accountability.**

- (a) The permittee shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code § 145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions for this engine from May 1 through September 30. The surrendered NOx 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 sources subject to 25 Pa. Code Chapter 129 (Additional NOx Requirements) 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 permittee may deduct the difference or any portion of the difference from the amount of actual emissions from sources subject to 25 Pa. Code Chapter 129 (Additional NOx Requirements) at the permittee's other facilities.
- (c) By November 1, 2005, and by November 1 of each year thereafter, the permittee 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; and
- (2) the calculations used to determine the quantity of NOx allowances required to be surrendered.
- (d) If a permittee fails to comply with subcondtion (c), the permittee shall by December 31, surrender three (3) 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 subcondition (d) does not affect the liability of the permittee 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 permittee demonstrates that a lesser number of days should be considered.
- (2) Each ton of excess emissions is a separate violation.

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



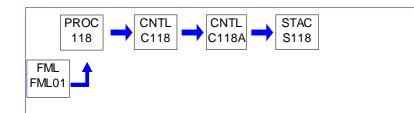
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## **SECTION D.** Source Level Requirements

Source ID: 118 Source Name: NATURAL GAS GENERATOR (3.8 MW)

Source Capacity/Throughput: 35,444.000 CF/HR Natural Gas



#### 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 this source in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 gr/dscf, 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 a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

# 003 [25 Pa. Code §123.41]

## Limitations

The permittee 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.

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 C.F.R. § 60.4233(e).]

The emissions from this engine shall not exceed any of the following:

- (a) NOx: 0.18 g/bhp-hr; 2.11 lb/hr; 13.6 ppmvd @ 15% O2, or 80% removal efficiency, whichever is less stringent; and 8.97 tons/yr, calculated on a 12-month rolling basis;
- (b) CO: 0.40 g/bhp-hr; 4.74 lb/hr; 50.60 ppmvd at 15% O2; and 20.10 tons/yr, calculated on a 12-month rolling basis; and
- (c) VOC: 0.07g/bhp-hr; 0.81lb/hr; 15.30 ppmvd at 15% O2; and 3.44 tons/yr, calculated on a 12-month rolling basis.

[Compliance with the NOx emission limit in paragraph (a) in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.112(g)(3)(ii)(A).]

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine

The permittee must operate and maintain stationary SI ICE to achieve the emission standards as required in 40 C.F.R. § 60.4233(e) over the entire life of the engine.

### Fuel Restriction(s).

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The engine shall fire natural gas only.







## Throughput Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The engine shall be limited to natural gas usage of 301.3 MMSCF on a 12-month rolling basis.

#### II. TESTING REQUIREMENTS.

# # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall perform a stack test using the Department-approved procedures to show compliance with the more stringent emission limits for this source. Compliance with the NOx, CO, and VOC emission limit, above, ensures compliance with the emission limits specified in 40 C.F.R. § 60.4233(e). The testing shall be performed for NOx, CO and VOC emissions as specified in 40 C.F.R. § 60.4244.
- (b) The permittee shall, at least ninety (90) days prior to the test, 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. No test protocol is needed, if the permittee is using a Department approved protocol for this engine, if there have been no changes in regulatory requirements or source specifics, and there is no new submittal requested by the Department.
- (c) 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, and, if used, the previously Department approved test protocol (identified by the date of the Department's acceptance letter).
- (d) 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.
- (e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

[Compliance with the requirements in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.115(b)(6).]

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

As per 40 C.F.R. § 60.4243(b)(2)(ii), the permittee must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, to demonstrate compliance with the emission standards specified in 40 C.F.R. § 60.4233(e) and according to the test methods and procedures specified in 40 C.F.R. § 60.4244.

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

The permittee must follow the following procedures when conducting a performance test:

- (a) each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 C.F.R. § 60.8 and under the specific conditions that are specified by Table 2 to 40 C.F.R. 60 Subpart JJJJ;
- (b) the permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 C.F.R. § 60.8(c). If the engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine:
- (c) the permittee must conduct three separate test runs for each performance test required in 40 C.F.R. § 60.4244, as specified in 40 C.F.R. § 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour;
- (d) to determine compliance with the NOx mass per unit output emission limitation, convert the concentration of NOx in the





engine exhaust using Equation 1 in 40 C.F.R. § 60.4244;

- (e) to determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 in 40 C.F.R. § 60.4244;
- (f) when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 in 40 C.F.R. § 60.4244; and
- (g) VOC emissions can be measured using EPA Method 25A. Alt 066 and Alt 078 can be used as alternatives for EPA Methods 25A and 18 for 40 CFR 60, Subpart JJJJ, Spark Ignition IC Engines; TECO Model 55C is an approved alternative for EPA Methods 25A and 18 for NMOC and methane. If the permittee chooses to measure VOC emissions using either Method 18 of 40 C.F.R. part 60, appendix A, or Method 320 of 40 C.F.R. part 63, appendix A, then the permittee has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 in 40 C.F.R. § 60.4244. The corrected VOC concentration can then be placed on a propane basis using Equation 6 in 40 C.F.R. § 60.4244.

#### 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.

The permittee shall maintain and operate the following monitoring devices that measure and record:

- (a) the amount of natural gas used by the engine;
- (b) the operating hours of each month;
- (c) the SCR outlet gas temperature; and
- (d) urea injection rate (liters/hour) recorded as a daily average.

## IV. RECORDKEEPING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of

- (a) the natural gas usage on a monthly basis and on a 12-month rolling basis;
- (b) the engine total operating hours each month;
- (c) the engine total operating hours between two (2) consecutive performance tests and the date of each performance test;
- (d) the SCR/CO catalyst system outlet temperature and the urea injection rate (liters/hour) as a daily average; and
- (e) the urea purchase orders and concentration of each purchase order.

### # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

As per 40 C.F.R. § 60.4243(b)(2)(ii), the permittee must keep a maintenance plan and records of conducted maintenance.

### # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

[Additional authority for this permit condition is derived from 40 C.F.R. § 60.4243(b)(2)(ii)].







The permittee must keep the following records of:

- (a) all notifications submitted to comply with 40 C.F.R. 60 Subpart JJJJ and all documentation supporting any notification;
- (b) maintenance plan and maintenance conducted on the engine; and
- (c) documentation that the engine meets the emission standards.

#### V. REPORTING REQUIREMENTS.

# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

As per 40 C.F.R. § 60.4245(d), the permittee must submit a copy of each performance test as conducted in 40 C.F.R. § 60.4244 within 60 days after the test has been completed.

#### VI. WORK PRACTICE REQUIREMENTS.

## # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 60, Subpart JJJJ.]

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 60.4243(d).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 60.4243(d), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart JJJJ, and must meet all requirements for non-emergency engines.

## # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The SCR and CO catalyst system shall be operated whenever the engine is operating, and in accordance with the manufacturer's specifications.
- (b) The permittee shall maintain and operate the engine and air cleaning devices in accordance with the procedures and schedules specified in its Operations & Maintenance Plan (Revised November 2013).

#### # 019 [25 Pa. Code §129.203]

Stationary internal combustion engines.

- (a) By October 31 each year, the permittee shall calculate the difference between the actual emissions from the engine during the period from May 1 through September 30 and the allowable emissions for that period.
- (b) The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for the engine for the period by the horsepower rating of the engine and by 3.0 grams of NOx per brake horsepower-hour.

## # 020 [25 Pa. Code §129.204]

## Emission accountability.

- (a) The permittee shall determine actual emissions in accordance with one of the following:
- (1) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx; or
- (2) The maximum hourly allowable NOx emission rate contained in the permit.
- (b) The permittee shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 C.F.R. §§ 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.







- (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 permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the permittee's other facilities.
- (d) By November 1 each year, the permittee 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; and
- (2) the calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If failing to comply with paragraph (d) above, the permittee 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.
- (f) The surrender of NOx allowances under paragraph (e) above does not affect the liability of the permittee 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.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

As per 40 C.F.R. § 60.4243(b)(2)(ii), the permittee must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

## VII. ADDITIONAL REQUIREMENTS.

# 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

As per 40 C.F.R. § 60.4230(a)(4(i), the engine under Source ID 118, as specified below, is subject to the requirements of 40 C.F.R. 60 Subpart JJJJ:

Manufacturer: Motoren Werke Mannheim

Model No.: TCG2032V16 Engine Family: TCG2032 Serial No.: 2209109 Model year: 2011

Maximum engine power: 5,316 brake horsepower Engine displacement: 272 liters (16,599 cu. inches)

Emission control equipment: Selective catalytic reduction with oxidation catalyst

Fuel used: Natural gas

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

The permittee must comply with the applicable General Provisions in 40 C.F.R. §§ 60.1 through 60.19.

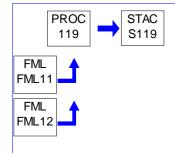
## \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 119 Source Name: DIESEL EMERGENCY GENERATOR (750-KW) (BLDG. 42)

Source Capacity/Throughput: 52.700 Gal/HR Diesel Fuel



#### RESTRICTIONS.

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

# # 001 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

## # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4202(a)(2) and 60.4205(b) and Part 1039, Appendix I; and 25 Pa. Code Chapter 122.]

The permittee shall ensure that emission into the outdoor atmosphere of the following pollutants from the engine of this emergency generator set do not exceed the following emission standards and rates:

Pollutant(s)	g/bkW-hr (g/bhp-hr)	Lbs/hr	Tons/yr
СО	3.5 (2.61)	1.12	0.28
HCs		0.22	0.055
NOx		9.65	2.41
NOx + NMHCs	6.4 (4.77)		
PM	0.20 (0.15)	0.29	0.073

Tons/yr = Tons per 12-month rolling period, calculated monthly.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.13(c).]

## Fuel Restriction(s).

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to

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

Diesel fuel used in this engine must meet the following per-gallon standards:

- (a) sulfur content: 15 ppm maximum; and
- (b) cetane index or aromatic content, as follows:
- (1) a minimum cetane index of 40; or
- (2) a maximum aromatic content of 35 volume percent.







## Operation Hours Restriction(s).

## # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4211(f)(1)–(3) and 25 Pa. Code Chapter 122.]

The permittee shall ensure that the engine of this emergency generator set is operated in compliance with the following operating hours restrictions:

- (a) A total operating time of less than or equal to 500 hours per year, calculated monthly as a 12-month rolling sum.
- (b) A total operating time of less than or equal to 50 hours per calendar year for non-emergency situations, except that the following operations are prohibited:
  - (1) Peak shaving.
  - (2) Demand response.
- (3) Supplying power to an electric grid to generate income, or otherwise supplying power as part of a financial arrangement with another entity.
  - (c) A total operating time of less than or equal to 100 hours per calendar year for the following purposes:
    - (1) Any maintenance, including readiness testing and tune-ups.
    - (2) The non-emergency situations indicated in (b), above (i.e., for less than or equal to 50 hours per calendar year).

[Compliance with this permit condition assures that the engine is considered an emergency engine in accordance with the provisions of 40 CFR Part 60, Subpart IIII, as vacated in part on May 1, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit.]

## 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 viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F;
- (3) tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)-(15); and
- (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 sulfur content in the fuel is less than 15 ppmw, is obtained each time a fuel oil delivery is made.

#### III. MONITORING REQUIREMENTS.

# 006 [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 Cl internal combustion engine?

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

The engine shall be equipped with a non-resettable hour meter.







#### IV. RECORDKEEPING REQUIREMENTS.

# 007 [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 25 Pa. Code § 127.441.]

The permittee shall maintain the following records for this emergency generator set:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation:
  - (1) The hours of operation for each type of operation on an operating day and calendar year basis.
  - (2) The total hours of operation, on a monthly and 12-month rolling basis.
- (c) The amount of fuel consumed by the engine of the emergency generator set on a monthly basis.
- (d) NOx, CO, NMHC, and PM emission calculations on a monthly basis and on a 12-month rolling sum basis; and
- (e) The fuel sulfur content.

#### 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.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR 60, Supart IIII.]

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 60.4211(f), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

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

The permittee must operate and maintain the engine to achieve the emission standards specified above over the entire life of the engine.

# 010 [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 derived from 25 Pa. Code § 127.441.]

The permittee shall:

(a) operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;







- (b) change only those emission-related settings that are permitted by the manufacturer;
- (c) meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply; and
- (d) install, configure, and operate the engine according to the manufacturer's emission-related specifications.

## VII. ADDITIONAL REQUIREMENTS.

### # 011 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) This source consists of an emergency generator set, model no. 750DQFAA, manufactured by Cummins Power Generation. The emergency generator set is rated at 750 ekW power output (standby).
- (b) The emergency generator set is equipped with a four-stroke, V-12, diesel fuel-fired, stationary reciprocating internal combustion engine, model no. QST30-G5 NR2, manufactured by Cummins, Inc. The engine is rated at 1,102 bhp power output (standby) and has a displacement of 2.53 liters per cylinder.

### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The engine of the emergency generator set is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart IIII. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. These shall be submitted as specified in Condition # 022, Section B, of this permit.

#### # 013 [25 Pa. Code §129.203]

### Stationary internal combustion engines.

On or before October 31 of each year, the permittee shall calculate the difference between the actual NOx emissions from, and the allowable NOx emissions for, the engine of this emergency generator set during the ozone season.

#### # 014 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

The permittee shall calculate the allowable NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values:

- (a) The hours of operation for the emergency generator set during the ozone season.
- (b) The maximum rated power output (bhp) for the engine indicated in Condition # 011(b), Section D (under Source ID 119), of this permit.
- (c) The emission rate of 2.3 g/bhp-hr.

#### # 015 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.204(b)(2)(ii) and (iv).]

- (a) The permittee shall calculate the actual NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values for the emergency generator set/engine:
  - (1) The hours of operation for the emergency generator set during the ozone season.
- (2) The maximum hourly NOx emission rate restriction for the engine indicated in Condition # 002, Section D (under Source ID 119), of this permit.
- (b) As an alternative to the calculation procedure in (a), above, the permittee may calculate the actual NOx emissions from the engine of the emergency generator set during the ozone season by using an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternative procedure does not underestimate actual NOx emissions. In conjunction with the alternative procedure for calculating actual NOx emissions, the permittee may also request an adjustment to the allowable NOx emissions calculation procedure specified in Condition # 014, Section D (under Source ID 119), of this permit. The adjustment to the





allowable NOx emissions calculation procedure shall be based upon the same emissions testing and correlations with operating parameters proposed in the alternative calculation procedure for actual NOx emissions, and shall not overestimate allowable NOx emissions. The alternative calculation and recordkeeping procedure(s) must be approved by the Department, in writing, prior to its implementation.

## # 016 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 97, Subparts AAAAA, EEEEE, and GGGGG, and 25 Pa. Code § 129.204(c) and (e)–(f).]

- (a) The permittee shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR §§ 96.102 and 96.302, respectively, for each ton of NOx by which the combined actual NOx emissions from the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during each ozone season exceed the allowable NOx emissions from the same sources during the same period. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of NOx allowances to surrender, any remaining fraction of a ton of NOx equal to or greater than 0.50 tons shall be deemed to equal 1 ton, and any fraction of a ton of NOx less than 0.50 tons shall be deemed to equal zero tons.
- (b) On or before November 1 of each year, the permittee shall surrender the NOx allowances required in (a), above, to the Department's designated NOx allowance tracking system account and submit the following information to the Department, in writing:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (c) If the permittee does not comply with (b)(1)–(2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NOx allowances for each NOx allowance that was required to be surrendered in (b)(1)–(2), above. The surrendered NOx allowances may be of current or later year vintage.

[Note: On July 6, 2011, EPA promulgated CSAPR to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season. Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402 and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

## # 017 [25 Pa. Code §129.204]

#### **Emission accountability.**

- (a) If the combined allowable NOx emissions for the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities (during the same period).
- (b) If the combined allowable NOx emissions for all sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from the engine of this emergency generator set or any other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility (during the same period).







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

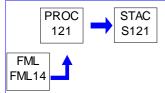






Source ID: 121 Source Name: DIESEL FIRE PUMPS (2)

Source Capacity/Throughput: N/A Diesel Fuel



#### I. RESTRICTIONS.

## Emission Restriction(s).

# 001 [25 Pa. Code §123.13]

#### **Processes**

The permittee shall not permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permit shall ensure that emission into the outdoor atmosphere of NOx from these fire pumps does not exceed any of the following rates:

- (a) 100 lbs/hr.
- (b) 1000 lbs/day.
- (c) 2.75 tons per ozone season.
- (d) 6.6 tons in any consecutive 12-month period.

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co
[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

Emissions from these fire pump engines shall not exceed the following (all units in grams/hp-hr):

- (a) for the 86 horsepower engine:
- (1) NMHC + NOx 3.5;
- (2) CO 3.7; and
- (3) PM 0.3.
- (b) for the 183 horsepower engine:
- (1) NMHC + NOx 3.0;
- (2) CO 2.6; and
- (3) PM 0.15.

### Fuel Restriction(s).

# 004 [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

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







Diesel fuel in this engine shall meet the following standards:

- (a) sulfur content maximum of 15 ppm; and
- (b) cetane index or aromatic content, as follows:
- (1) a minimum cetane index of 40; or
- (2) a maximum aromatic content of 35 volume percent.

[Compliance with the sulfur content limit in (a) assures compliance with 25 Pa. Code § 123.21.]

#### 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 viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F;
- (3) tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)-(15); and
- (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 sulfur content in the fuel is less than 15 ppmw, is obtained each time a fuel oil delivery is made.

## III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

## V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

## # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 60, Subpart IIII.]

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 60.4211(f), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines.





# 007 [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 derived from 25 Pa. Code § 127.441.]

The permittee shall:

- (a) operate and maintain the stationary CI internal combustion engine and any control device according to the manufacturer's emission-related written instructions;
- (b) change only those emission-related settings that are permitted by the manufacturer; and
- (c) operate the engine according to the manufacturer's emission-related specifications.

### VII. ADDITIONAL REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source grouping consists of two fire pumps, each equipped with a diesel fuel-fired engine, as follows:

- (a) 86 horsepower, 4-cylinder, Clark Fire Pump engine, Model number: 4045HF280E,F,G.
- (b) 183 horsepower, 6-cylinder, Clark Fire Pump engine, Model number: 6068HF285K,L.

These engines were originally permitted under eRFD #'s 4852 and 5252, respectively.

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

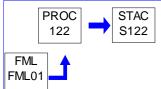






Source ID: 122 Source Name: NG FIRED EMER. GEN. (1,468 HP)

Source Capacity/Throughput: 9.810 MCF/HR Natural Gas



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.21]

**General** 

No person may 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.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4233(e) and 60.4234, and 25 Pa. Code Chapter 122.]

The permittee shall ensure that emission into the outdoor atmosphere of the following pollutants from the engine of this emergency generator set does not exceed the following emission standards and rates:

Pollutant	Pollutant g/bhp-hr ppmv, dry basis, corrected to 15% oxygen (O2)		Lbs/hr	Tons/yr	
СО	4.0	540	5.86	1.46	
NOx	2.0	160	6.47	1.62	
VOCs	1.0	86	0.13	0.032	

VOCs = Volatile organic compounds, excluding formaldehyde.

ppmv = Parts per million, by volume.

Tons/yr = Tons per 12-month rolling period, calculated monthly.

#### Fuel Restriction(s).

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only natural gas shall be used in the operation of this engine.

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

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4243(d)(2)–(3) and 25 Pa. Code Chapter 122.]

The permittee shall ensure that the engine of this emergency generator set is operated in compliance with the following operating hours restrictions:

- (a) A total operating time of less than 500 hours per year, calculated monthly as a 12-month rolling sum.
- (b) A total operating time of less than or equal to 50 hours per calendar year for non-emergency situations, except that the following operations are prohibited:







- (1) Peak shaving.
- (2) Demand response.
- (3) Supplying power to an electric grid to generate income, or otherwise supplying power as part of a financial arrangement with another entity.
  - (c) A total operating time of less than or equal to a total of 100 hours per calendar year for the following purposes:
    - (1) Any maintenance, including readiness testing and tune-ups.
    - (2) The non-emergency situations indicated in (b), above (i.e., for less than or equal to 50 hours per calendar year).

[Compliance with this permit condition assures that the engine is considered an emergency engine in accordance with the provisions of 40 CFR Part 60, Subpart JJJJ, as vacated in part on May 1, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit.]

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

## # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following operating parameters for this emergency generator set:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation, on an operating day basis:
  - (1) The hours of operation for each type of operation.
  - (2) The total hours of operation.
- (c) The amount of natural gas consumed by the engine of the emergency generator set on a monthly basis.

## # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the following emissions from the engine of this emergency generator set, using a Department-approved method(s):

- (a) The CO emissions, on a monthly and 12-month rolling basis.
- (b) The NOx emissions on a monthly, ozone season (i.e., the period from May 1–September 30 of each year), and 12-month rolling basis.
- (c) The VOC emissions, on a monthly and 12-month rolling basis.

### IV. RECORDKEEPING REQUIREMENTS.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following operating parameters for this emergency generator set:







- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation:
  - (1) The hours of operation for each type of operation, on an operating day, monthly, and annual basis.
  - (2) The total hours of operation, on an operating day, monthly, and 12-month rolling basis.
- (c) The amount of natural gas consumed by the engine of the emergency generator set on a monthly and 12-month rolling basis, calculated using a Department-approved method.

## # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4245(a)(3) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the manufacturer's emission-related written instructions (or operating manual) for the engine of this emergency generator set, including documentation that the engine is certified to meet the emission standards specified in Condition # 002, Section D (under Source ID 122), of this permit.

### # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4243(a)(1) and 60.4245(a)(2), and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of all maintenance performed for the engine of this emergency generator set. These records shall contain, at a minimum, the following:

- (a) The date and time of the maintenance.
- (b) The reading on the hour-meter of the emergency generator set.
- (c) The type of maintenance performed.

## # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following emissions from the engine of this emergency generator set, calculated using a Department-approved method(s):

- (a) The CO emissions, on a monthly and 12-month rolling basis.
- (b) The NOx emissions on a monthly, ozone season, and 12-month rolling basis.
- (c) The VOC emissions, on a monthly and 12-month rolling basis.

#### 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 derived from 40 CFR § 60.4243(a)(1) and 25 Pa. Code Chapter 122 and § 127.25.]







- (a) The permittee shall ensure that the engine of this emergency generator set is certified to meet the emission standards specified in Condition # 002, Section D (under Source ID 122), of this permit; and is configured, operated, and maintained in a manner consistent with good safety, operating and maintenance, and air pollution control practices, as applicable, and in accordance with the manufacturer's specifications and emission-related written instructions.
- (b) The permittee shall not change any emission-related settings on the engine except those that are permitted by the manufacturer.

## # 012 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4237(c) and 25 Pa. Code Chapter 122.]

- (a) The permittee shall install, and appropriately operate and maintain, the following equipment for this emergency generator set:
  - (1) A non-resettable hour meter.
  - (2) An air-to-fuel ratio controller.
- (b) The permittee shall ensure that the air-to-fuel ratio controller is operated and maintained appropriately in order to ensure proper operation of the engine to minimize emissions at all times.

#### VII. ADDITIONAL REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) This source consists of an emergency generator set, model no. G3512, manufactured by Caterpillar, Inc. The emergency generator set is rated at 1,000 ekW power output (standby).
- (b) The emergency generator set is equipped with a four-stroke, lean-burn, V-12, natural gas-fired, stationary reciprocating internal combustion engine, model no. G3512 TA, manufactured by Caterpillar, Inc. The engine is rated at 1,468 bhp power output (standby) and has a displacement of 4.333 liters per cylinder.

## # 014 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The engine of the emergency generator set is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart JJJJ. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. These shall be submitted as specified in Condition # 022, Section B, of this permit.

## # 015 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

On or before October 31 of each year, the permittee shall calculate the difference between the actual NOx emissions from, and the allowable NOx emissions for, the engine of this emergency generator set during the ozone season.

## # 016 [25 Pa. Code §129.203]

## Stationary internal combustion engines.

The permittee shall calculate the allowable NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values:

- (a) The hours of operation for the emergency generator set during the ozone season.
- (b) The maximum rated power output (bhp) for the engine indicated in Condition # 013(b), Section D (under Source ID 122), of this permit.
  - (c) The emission rate of 3.0 g/bhp-hr.





#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.204(b)(2)(ii) and (iv).]

- (a) The permittee shall calculate the actual NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values for the emergency generator set/engine:
  - (1) The hours of operation for the emergency generator set during the ozone season.
- (2) The maximum hourly NOx emission rate restriction for the engine indicated in Condition # 002, Section D (under Source ID 122), of this permit.
- (b) As an alternative to the calculation procedure in (a), above, the permittee may calculate the actual NOx emissions from the engine of the emergency generator set during the ozone season by using an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternative procedure does not underestimate actual NOx emissions. In conjunction with the alternative procedure for calculating actual NOx emissions, the permittee may also request an adjustment to the allowable NOx emissions calculation procedure specified in Condition # 016, Section D (under Source ID 122), of this permit. The adjustment to the allowable NOx emissions calculation procedure shall be based upon the same emissions testing and correlations with operating parameters proposed in the alternative calculation procedure for actual NOx emissions, and shall not overestimate allowable NOx emissions. The alternative calculation and recordkeeping procedure(s) must be approved by the Department, in writing, prior to its implementation.

#### # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 97, Subparts AAAAA, EEEEE, and GGGGG, and 25 Pa. Code § 129.204(c) and (e)-(f).]

- (a) The permittee shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR §§ 96.102 and 96.302, respectively, for each ton of NOx by which the combined actual NOx emissions from the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during each ozone season exceed the allowable NOx emissions from the same sources during the same period. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of NOx allowances to surrender, any remaining fraction of a ton of NOx equal to or greater than 0.50 tons shall be deemed to equal 1 ton, and any fraction of a ton of NOx less than 0.50 tons shall be deemed to equal zero tons.
- (b) On or before November 1 of each year, the permittee shall surrender the NOx allowances required in (a), above, to the Department's designated NOx allowance tracking system account and submit the following information to the Department, in writing:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (c) If the permittee does not comply with (b)(1)-(2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NOx allowances for each NOx allowance that was required to be surrendered in (b)(1)–(2), above. The surrendered NOx allowances may be of current or later year vintage.

[Note: On July 6, 2011, EPA promulgated CSAPR to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On





April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season. Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402 and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

## # 019 [25 Pa. Code §129.204]

## Emission accountability.

- (a) If the combined allowable NOx emissions for the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities (during the same period).
- (b) If the combined allowable NOx emissions for all sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from the engine of this emergency generator set or any other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility (during the same period).

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







Source ID: 123 Source Name: 1,000-EKW EMERGENCY GENERATOR SET (BUILDING 29)

Source Capacity/Throughput: 9.903 MCF/HR Natural Gas

PROC STAC S123



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 123.13(c)(1)(i).]

The permittee shall ensure that emission into the outdoor atmosphere of PM from the engine of this emergency generator set occurs in such a manner that the concentration of filterable PM in the exhaust gas does not exceed 0.04 gr/dscf.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4233(e) and 60.4234, and 25 Pa. Code Chapter 122.]

The permittee shall ensure that emission into the outdoor atmosphere of the following pollutants from the engine of this emergency generator set does not exceed the following emission standards<sup>1</sup>:

Pollutant	g/bhp-hr	ppmv, dry basis, corrected to 15% oxygen (O2
СО	4.0	540
NOx	2.0	160
VOCs	1.0	86

CO = Carbon monoxide.

NOx = Nitrogen oxides.

VOCs = VOCs, excluding formaldehyde.

<sup>1</sup> The permittee may comply with the emission standards in either set of units (i.e., same set of units for all pollutants).

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that emission into the outdoor atmosphere of NOx from the engine of this emergency generator set does not exceed either of the following rates:

(a) 3.24 lbs/hr.

(b) 0.324 tons/yr, calculated monthly as a 12-month rolling sum.

## Fuel Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that natural gas is the only fuel consumed by the engine of this emergency generator set.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.21(b).]





## Operation Hours Restriction(s).

#### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4243(d)(2)-(3) and 25 Pa. Code Chapter 122.]

The permittee shall ensure that the engine of this emergency generator set is operated in compliance with the following operating hours restrictions:

- (a) There is no operating hours restriction for emergency situations.
- (b) A total operating time of less than or equal to 50 hours per calendar year for non-emergency situations, except that the following operations are prohibited:
  - (1) Peak shaving.
  - (2) Demand response.
- (3) Supplying power to an electric grid to generate income, or otherwise supplying power as part of a financial arrangement with another entity.
  - (c) A total operating time of less than or equal to a total of 100 hours per calendar year for the following purposes:
    - (1) Any maintenance, including readiness testing and tune-ups.
    - (2) The non-emergency situations indicated in (b), above.

[Compliance with this permit condition assures that the permittee will not be subject to the provisions of 40 CFR Part 63, Subpart ZZZZ, as vacated in part on May 1, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit.]

## Throughput Restriction(s).

#### # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that the total amount of natural gas consumed by the engine of this emergency generator set does not exceed 1,981 mcf/yr, calculated monthly as a 12-month rolling sum.

#### 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.

#### # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following operating parameters for this emergency generator set:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation, on an operating day basis:
  - (1) The hours of operation for each type of operation.
  - (2) The total hours of operation.
- (c) The amount of natural gas consumed by the engine of the emergency generator set on a monthly basis.





## # 008 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall calculate the following emissions from the engine of this emergency generator set, using a Department-approved method(s):

- (a) The CO emissions, on a monthly and 12-month rolling basis.
- (b) The NOx emissions on a monthly, ozone season (i.e., the period from May 1–September 30 of each year), and 12-month rolling basis.
- (c) The VOC emissions, on a monthly and 12-month rolling basis.

## IV. RECORDKEEPING REQUIREMENTS.

### # 009 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall maintain records of the following operating parameters for this emergency generator set:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation:
  - (1) The hours of operation for each type of operation, on an operating day, monthly, and annual basis.
  - (2) The total hours of operation, on an operating day, monthly, and 12-month rolling basis.
- (c) The amount of natural gas consumed by the engine of the emergency generator set on a monthly and 12-month rolling basis, calculated using a Department-approved method.

## # 010 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4245(a)(3) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the manufacturer's emission-related written instructions (or operating manual) for the engine of this emergency generator set, including documentation that the engine is certified to meet the emission standards specified in Condition # 002, Section D (under Source ID 123), of this permit.

#### # 011 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4243(a)(1) and 60.4245(a)(2), and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of all maintenance performed for this emergency generator set. These records shall contain, at a minimum, the following:

- (a) The date and time of the maintenance.
- (b) The type of maintenance performed.

### # 012 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall maintain records of the following emissions from the engine of this emergency generator set, calculated using a Department-approved method(s):

(a) The CO emissions, on a monthly and 12-month rolling basis.







- (b) The NOx emissions on a monthly, ozone season, and 12-month rolling basis.
- (c) The VOC emissions, on a monthly and 12-month rolling basis.

#### 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.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4243(a)(1) and 25 Pa. Code Chapter 122 and § 127.25.]

- (a) The permittee shall ensure that the engine of this emergency generator set is certified to meet the emission standards specified in Condition # 002, Section D (under Source ID 123), of this permit; and is configured, operated, and maintained in a manner consistent with good safety, operating and maintenance, and air pollution control practices, as applicable, and in accordance with the manufacturer's specifications and emission-related written instructions.
- (b) The permittee shall not change any emission-related settings on the engine except those that are permitted by the manufacturer.

## # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4237(c) and 25 Pa. Code Chapter 122.]

- (a) The permittee shall install, and appropriately operate and maintain, the following equipment for this emergency generator set:
  - (1) A non-resettable hour meter.
  - (2) An air-to-fuel ratio controller.
- (b) The permittee shall ensure that the air-to-fuel ratio controller is operated and maintained appropriately in order to ensure proper operation of the engine to minimize emissions at all times.

#### VII. ADDITIONAL REQUIREMENTS.

### # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) This source consists of an emergency generator set, model no. G3512, manufactured by Caterpillar, Inc. The emergency generator set is rated at 1,000 ekW power output (standby).
- (b) The emergency generator set is equipped with a 12-cylinder, natural gas-fired, stationary reciprocating internal combustion engine, also model no. G3512 and manufactured by Caterpillar, Inc. The engine is rated at 1,468 bhp power output (standby) and has a displacement of 4.33 liters per cylinder.

### # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The engine of the emergency generator set is subject to, and shall comply with all applicable requirements of, 40 CFR Part 60, Subpart JJJJ. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. These shall be submitted as specified in Condition # 022, Section B, of this permit.





#### # 017 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

On or before October 31 of each year, the permittee shall calculate the difference between the actual NOx emissions from, and the allowable NOx emissions for, the engine of this emergency generator set during the ozone season.

#### # 018 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

The permittee shall calculate the allowable NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values:

- (a) The hours of operation for the emergency generator set during the ozone season.
- (b) The rated power output (bhp) of the engine of the emergency generator set, as indicated in Condition # 015(b), Section D (under Source ID 123), of this permit.
- (c) The emission rate of 3.0 g/bhp-hr.

#### # 019 [25 Pa. Code §129.204]

## **Emission accountability.**

- (a) The permittee shall calculate the actual NOx emissions from the engine of this emergency generator set during the ozone season by multiplying the following values for the emergency generator set/engine:
  - (1) The hours of operation for the emergency generator set during the ozone season.
- (2) The hourly NOx emission rate restriction specified in Condition # 003(a), Section D (under Source ID 123), of this permit.
- (b) As an alternative to the calculation procedure in (a), above, the permittee may calculate the actual NOx emissions from the engine of the emergency generator set during the ozone season by using an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternative procedure does not underestimate actual NOx emissions. In conjunction with the alternative procedure for calculating actual NOx emissions, the permittee may also request an adjustment to the allowable NOx emissions calculation procedure specified in Condition # 018, Section D (under Source ID 123), of this permit. The adjustment to the allowable NOx emissions calculation procedure shall be based upon the same emissions testing and correlations with operating parameters proposed in the alternative calculation procedure for actual NOx emissions, and shall not overestimate allowable NOx emissions. The alternative calculation and recordkeeping procedure(s) must be approved by the Department, in writing, prior to their implementation.

#### # 020 [25 Pa. Code §129.204]

#### **Emission accountability.**

- (a) If the combined allowable NOx emissions for the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from sources subject to the provisions of 25 Pa. Code §§ 129.201– 129.203 at any of the permittee's other facilities (during the same period).
- (b) If the combined allowable NOx emissions for all sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from the engine of this emergency generator set or any other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility (during the same period).

#### # 021 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 97, Subparts AAAAA, EEEEE, and GGGGG, and 25 Pa. Code § 129.204(c) and (e)–(f).]

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- (a) The permittee shall surrender to the Department one Clean Air Interstate Rule (CAIR) NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR §§ 96.102 and 96.302, respectively, for each ton of NOx by which the combined actual NOx emissions from the engine of this emergency generator set and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during each ozone season exceed the allowable NOx emissions from the same sources during the same period. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of NOx allowances to surrender, any remaining fraction of a ton of NOx equal to or greater than 0.50 tons shall be deemed to equal 1 ton, and any fraction of a ton of NOx less than 0.50 tons shall be deemed to equal zero tons.
- (b) On or before November 1 of each year, the permittee shall surrender the NOx allowances required in (a), above, to the Department's designated NOx allowance tracking system account and submit the following information to the Department, in writing:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (c) If the permittee does not comply with (b)(1)–(2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NOx allowances for each NOx allowance that was required to be surrendered in (b)(1)–(2), above. The surrendered NOx allowances may be of current or later year vintage.

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season. Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402 and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

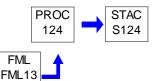
\*\*\* Permit Shield in Effect. \*\*\*





Source ID: 124 Source Name: TEMP. (RENTAL) DIESEL 2,000-EKW EMERGENCY GENERATOR SETS (2)

Source Capacity/Throughput: 270.000 Gal/HR Diesel Fuel



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4202(a)(2) and 60.4205(b) and Part 1039, Appendix I; and 25 Pa. Code Chapter 122.]

The permittee shall ensure that emission into the outdoor atmosphere of the following pollutants from the engines of these emergency generator sets do not exceed the following emission standards and rates:

Pollutant(s)	g/bkW-hr (g/bhp-hr)	Lbs/hr (each / total)	Tons/yr (each / total)
СО	3.5 (2.61)	3.979 / 7.959	0.2985 / 0.5969
HCs		1.11 / 2.22	0.0832/0.166
NOx		41.987 / 83.974	3.1490 / 6.2980
NOx + NMHCs	6.4 (4.77)		
PM	0.20 (0.15)	0.5635 / 1.127	0.04226 / 0.08453

Tons/yr = Tons per 12-month rolling period, calculated monthly.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.13(c).]

# Fuel Restriction(s).

## # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4207(b) and 1090.305(b)–(c), and 25 Pa. Code Chapter 122 and § 127.443(b).]

- (a) The permittee shall ensure that diesel fuel/No. 2 fuel oil is the only fuel consumed by the engines of these emergency generator sets.
- (b) The diesel fuel/No. 2 fuel oil shall comply with the following per-gallon standards:
  - (1) The sulfur content shall not exceed 15 ppm, by weight (0.0015%, by weight).
  - (2) Either of the following:
    - (i) The cetane index shall be equal to or greater than 40.
    - (ii) The aromatic content shall not exceed 35%, by volume.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.21(b).]







## Operation Hours Restriction(s).

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.4211(f)(1)–(3) and 25 Pa. Code Chapter 122.]

The permittee shall ensure that each of the engines of these emergency generator sets is operated in compliance with the following operating hours restrictions:

- (a) A total operating time of less than or equal to 150 hours per year, calculated monthly as a 12-month rolling sum.
- (b) A total operating time of less than or equal to 50 hours per calendar year for non-emergency situations, except that the following operations are prohibited:
  - (1) Peak shaving.
  - (2) Demand response.
- (3) Supplying power to an electric grid to generate income, or otherwise supplying power as part of a financial arrangement with another entity.
  - (c) A total operating time of less than or equal to 100 hours per calendar year for the following purposes:
    - (1) Any maintenance, including readiness testing and tune-ups.
    - (2) The non-emergency situations indicated in (b), above (i.e., for less than or equal to 50 hours per calendar year).

[Compliance with this permit condition assures that the engines are considered emergency engines in accordance with the provisions of 40 CFR Part 60, Subpart IIII, as vacated in part on May 1, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit.]

## II. TESTING REQUIREMENTS.

## # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 139.16(1) and (3).]

- (a) The following testing requirements are applicable to the diesel fuel/No. 2 fuel oil consumed by the engines of these emergency generator sets:
- (1) The fuel sample shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the permittee shall collect the sample employing the procedures and equipment specified in ASTM International (ASTM) Standard D4057 or D4177, as appropriate.
- (2) Unless an alternative method(s) is approved by the Department, in writing, only the following ASTM standards may be used to determine the following respective constituents or property for the diesel fuel/No. 2 fuel oil:

Constituent/Property ASTM Standards

Sulfur Content D129, D1266, D1552, D2622, or D4294

Cetane Index D613, D976, or D4737 Aromatic Content D5186 or D5292

(b) The testing requirements indicated in (a)(1)–(2), above, shall be waived for a given shipment of diesel fuel/No. 2 fuel oil in the event that the permittee obtains either a laboratory analysis or other certification (e.g., delivery receipt) from the fuel supplier in accordance with Condition # 008, Section D (under Source ID 124), of this permit.







## III. MONITORING REQUIREMENTS.

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall monitor the following operating parameters for each of the engines of these emergency generator sets:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation, on an operating day basis:
  - (1) The hours of operation for each type of operation.
  - (2) The total hours of operation.
- (c) The amount of diesel fuel/No. 2 fuel oil (gallons) consumed on a monthly basis.

#### # 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall calculate the following emissions from each of the engines of these emergency generator sets, as well as the totals for both engines, using Department-approved methods:

- (a) The CO emissions, on a monthly and 12-month rolling basis.
- (b) The HC emissions, on a monthly and 12-month rolling basis.
- (c) The NOx emissions, on a monthly, ozone season, and 12-month rolling basis.
- (d) The PM emissions, on a monthly and 12-month rolling basis.

## IV. RECORDKEEPING REQUIREMENTS.

## # 007 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall maintain records of the following for each specific emergency generator set installed, operated, and maintained as part of this source grouping:

- (a) The dates brought on and removed from the site.
- (b) The following information for the emergency generator set:
  - (1) The manufacturer.
  - (2) The model no.
  - (3) The rated power output (ekW).
- (c) The following information for the engine of the emergency generator set:
  - (1) The manufacturer.
  - (2) The model number.
  - (3) The serial number.
  - (4) The rated power output (bhp).
  - (5) The displacement (L/cylinder).







- (6) The model year (and date of manufacture, if known).
- (7) The applicable emission standards and documentation that the engine is certified to meet these (e.g., EPA certificate of conformity, etc.)
- (8) Performance data from the manufacturer (including, at a minimum, the No. 2 fuel oil/diesel fuel consumption rates at/near the anticipated and full [standby] operating loads).
- (9) Emissions data from the manufacturer (to demonstrate compliance with the lbs/hr emission rate restrictions indicated in Condition # 001, Section D (under Source ID 124), of this permit).
  - (10) The manufacturers' emission-related written instructions (or operating manual).

## # 008 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of the following operating parameters for each of the engines of these emergency generator sets:

- (a) The type(s) of operation, on an operating day basis.
- (b) The following hours of operation, on an operating day, monthly, and calendar year basis:
  - (1) The hours of operation for each type of operation.
  - (2) The total hours of operation.
- (c) The amount of diesel fuel/No. 2 fuel oil (gallons) consumed on a monthly and 12-month rolling basis, calculated using a Department-approved method.

## # 009 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of the corresponding laboratory analysis or other certification from the fuel supplier for each shipment of diesel fuel/No. 2 fuel oil received for the engines of these emergency generator sets. The laboratory analysis or other certification shall specify both of the following:

- (a) The sulfur content or maximum sulfur content (ppm, by weight, or %, by weight).
- (b) Either (or both) of the following:
  - (1) The cetane index.
  - (2) The aromatic content (%, by volume).

### # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain records of all maintenance performed for the engines of these emergency generator sets (while on-site). These records shall contain, at a minimum, the following for each engine:

- (a) The date and time of the maintenance.
- (b) The type of maintenance performed.

## # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain records of the following emissions from each of the engines of these emergency generator sets, as well as the totals for both engines, calculated using Department-approved methods:







- (a) The CO emissions, on a monthly and 12-month rolling basis.
- (b) The HC emissions, on a monthly and 12-month rolling basis.
- (c) The NOx emissions, on a monthly, ozone season, and 12-month rolling basis.
- (d) The PM emissions, on a monthly and 12-month rolling basis.

#### 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.

- (a) The permittee shall not install, operate, or maintain these emergency generator sets on-site except when Source ID 118 is down for maintenance or otherwise not operational.
- (b) Within 2 business days after installing an emergency generator set(s) as part of this source grouping, the permittee shall provide written or e-mailed notification to the Department of the installation. The notification shall also include as much information required in Condition # 007(a)–(c), Section D (under Source ID 124), of this permit, as is immediately known.

#### # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain a non-resettable hour meter for each of these emergency generator sets.

# # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4209 and 60.4211(a)(1)–(3), and 25 Pa. Code Chapter 122 and § 127.444.]

- (a) The permittee shall ensure that each of the engines of these emergency generator sets is configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions.
- (b) The permittee shall not change any emission-related settings on the engines, except those that are permitted by the manufacturer.

[Compliance with this streamlined permit condition assures compliance with 40 CFR  $\S$  60.4211(a)(2) and that the permittee will not be subject to 40 CFR  $\S$  60.4211(g)(1)–(3).]

#### VII. ADDITIONAL REQUIREMENTS.

### # 015 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) This source grouping shall consist of (up to) two temporary (rental) emergency generator sets, model no. XQ2000, manufactured by Caterpillar, Inc., or equivalent. Each emergency generator set shall be rated at less than or equal to 2,000 ekW power output (standby).
- (b) Each emergency generator set shall be equipped with a diesel fuel-fired, stationary reciprocating internal combustion engine, model no. 3516C DITA, manufactured by Caterpillar, Inc., or equivalent. Each engine shall have a model year of 2011 or later, be rated at less than or equal to 2,912 bhp power output (standby), and have a displacement of less than 10 liters per cylinder.





#### #016 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Each of the engines of these emergency generator sets shall be subject to, and comply with all applicable provisions of, 40 CFR Part 60, Subpart IIII. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. These shall be submitted as specified in Condition # 022, Section B, of this permit.

#### # 017 [25 Pa. Code §129.203]

## Stationary internal combustion engines.

On or before October 31 of each year, the permittee shall calculate the difference between the actual NOx emissions from, and the allowable NOx emissions for, the engines of these emergency generator sets (if rated at greater than 1,000 bhp power output) during the ozone season.

#### # 018 [25 Pa. Code §129.203]

## Stationary internal combustion engines.

The permittee shall calculate the allowable NOx emissions from the engines of these emergency generator sets (if rated at greater than 1,000 bhp power output) during the ozone season by multiplying the following values:

- (a) The hours of operation for the emergency generator sets during the ozone season.
- (b) The rated power output(s) (bhp) for the engine(s), as recorded in Condition # 007(c)(4), Section D (under Source ID 124), of this permit.
- (c) The emission rate of 2.3 g/bhp-hr.

### [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.204(b)(2)(ii) and (iv).]

- (a) The permittee shall calculate the actual NOx emissions from the engines of these emergency generator sets (if rated at greater than 1,000 bhp power output) during the ozone season by multiplying the following values for the emergency generator sets/engines:
  - (1) The hours of operation for the emergency generator sets during the ozone season.
- (2) The maximum hourly NOx emission rate restriction for each engine indicated in Condition # 001, Section D (under Source ID 124), of this permit.
- (b) As an alternative to the calculation procedure in (a), above, the permittee may calculate the actual NOx emissions from the engines of the emergency generator sets during the ozone season by using an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternative procedure does not underestimate actual NOx emissions. In conjunction with the alternative procedure for calculating actual NOx emissions, the permittee may also request an adjustment to the allowable NOx emissions calculation procedure specified in Condition # 018, Section D (under Source ID 124), of this permit. The adjustment to the allowable NOx emissions calculation procedure shall be based upon the same emissions testing and correlations with operating parameters proposed in the alternative calculation procedure for actual NOx emissions, and shall not overestimate allowable NOx emissions. The alternative calculation and recordkeeping procedure(s) must be approved by the Department, in writing, prior to its implementation.

### [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Part 97, Subparts AAAAA, EEEEE, and GGGGG, and 25 Pa. Code § 129.204(c) and (e)-(f).]

(a) The permittee shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR §§ 96.102 and 96.302, respectively, for each ton of NOx by which the combined actual



NOx emissions from the engines of these emergency generator sets (i.e., those rated at greater than 1,000 bhp power output) and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during each ozone season exceed the allowable NOx emissions from the same sources during the same period. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of NOx allowances to surrender, any remaining fraction of a ton of NOx equal to or greater than 0.50 tons shall be deemed to equal 1 ton, and any fraction of a ton of NOx less than 0.50 tons shall be deemed to equal zero tons.

- (b) On or before November 1 of each year, the permittee shall surrender the NOx allowances required in (a), above, to the Department's designated NOx allowance tracking system account and submit the following information to the Department, in writing:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (c) If the permittee does not comply with (b)(1)-(2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NOx allowances for each NOx allowance that was required to be surrendered in (b)(1)-(2), above. The surrendered NOx allowances may be of current or later year vintage.

[Note: On July 6, 2011, EPA promulgated CSAPR to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season. Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402 and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

## # 021 [25 Pa. Code §129.204]

## Emission accountability.

- (a) If the combined allowable NOx emissions for the engines of these emergency generator sets (i.e., those rated at greater than 1,000 bhp power output) and all other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities (during the same period).
- (b) If the combined allowable NOx emissions for all sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at any of the permittee's other facilities during an ozone season exceed the combined actual NOx emissions from the same sources during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual NOx emissions from the engines of these emergency generator sets (i.e., those rated at greater than 1,000 bhp power output) or any other sources subject to the provisions of 25 Pa. Code §§ 129.201–129.203 at this facility (during the same period).

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







Group Name: **BRYAN BOILERS** 

Group Description: 15.000 MMBtu/hr Bryan Boilers Shared Conditions

Sources included in this group

ID	Name
035	BRYAN BOILER 1 - 15.00 MMBTU/HR
036	BRYAN BOILER 2 - 15.00 MMBTU/HR
037	BRYAN BOILER 3 - 15.00 MMBTU/HR

#### I. RESTRICTIONS.

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

#### # 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall ensure that emission into the outdoor atmosphere of PM from this boiler occurs in such a manner that the rate of the emission does not exceed 0.4 lb/mmBtu heat input.

#### # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.1.]

- (a) The permittee shall ensure that the emission into the outdoor atmosphere of NOx from this boiler occurs in such a manner that the concentration of the emission does not exceed either of the following:
  - (1) 30 ppmv, dry basis, corrected to 3% O2, when consuming natural gas.
  - (2) 90 ppmv, dry basis, corrected to 3% O2, when consuming No. 2 fuel oil.
- (b) The permittee shall ensure that the emission into the outdoor atmosphere of CO from this boiler occurs in such a manner that the concentration of the emission does not exceed 300 ppmv, dry basis, corrected to 3% O2.

#### # 003 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall limit the aggregate emissions from Source ID 035, 036, and 037, as follows:

- (a) carbon monoxide (CO): 6.17 tpy;
- (b) nitrogen oxides (NOx): 2.52 tpy;
- (c) particulate matter (PM): 1.87 tpy;
- (d) sulfur oxides (SOx): 7.62 tpy; and
- (e) volatile organic compounds (VOCs): 0.59 tpy,

where 'tpy' is tons per year determined on a twelve (12) month rolling basis.

## Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 123.22(e)(2) and 127.512(h).]

- (a) The permittee shall ensure that natural gas and No. 2 fuel oil, to which there has been no reclaimed or waste oil or other waste materials added, are the only fuels consumed by this boiler.
- (b) The sulfur content of the No. 2 fuel oil consumed by the boiler shall not exceed 15 ppm (0.0015%, by weight), except as specified in 25 Pa. Code § 123.22(e)(2)(ii)-(iii).

[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.42c(d) and 25 Pa. Code § 123.22(e)(1). Compliance with (b), above, assures that the permittee will not be subject to the requirements of 40 CFR § 60.43c(e)(1).]







## Throughput Restriction(s).

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the aggregate annual fuel throughput to Source IDs 035, 036, and 037, as follows:

- (a) Natural gas: 204 million CF per year; and
- (b) No. 2 fuel oil: 288,400 gallons per year.

#### 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.

## # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the amount and type of each fuel consumed by this boiler on a monthly basis, using non-resettable natural gas and No. 2 fuel oil meters.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, using a Department-approved method.

#### IV. RECORDKEEPING REQUIREMENTS.

## # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.48c(q)(2) and 25 Pa. Code Chapter 122.]

- (a) The permittee shall maintain records of the type and amount of each fuel consumed by this boiler on a monthly and 12-month rolling basis.
- (b) The permittee shall maintain records of the type and combined amount of each fuel consumed by the three (3) 15.000 MMBtu/hr Bryan Boilers (Source IDs 035–037) on a monthly and 12-month rolling basis.

[Compliance with this condition and Conditions # 004 and 006, Section D (under Source ID 135), of this permit, assures that the permittee will not be subject to the PM emission limit indicated in 40 CFR Part 63, Subpart JJJJJJ, Table 1, pursuant to 40 CFR § 63.11210(f).]

#### # 009 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain records of the following for this boiler (including the flue gas recirculation equipment):

- (a) inspections performed;
- (b) maintenance performed;
- (c) any deficiencies noted; and
- (d) any corrective actions taken.

# # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- (a) The permittee shall maintain records of the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, calculated using a Department-approved method.
- (b) The permittee shall maintain records of the combined CO, NOx, PM, SOx, VOC, and HAP emissions from the three (3) 15.000 MMBtu/hr Bryan Boilers (Source IDs 035–037) on a monthly and 12-month rolling basis, calculated using a Department-approved method.





# 011 [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 derived from 25 Pa. Code Chapter 122.]

The permittee shall maintain records of each fuel supplier certification submittal indicating the sulfur content or maximum sulfur content of the No. 2 fuel oil consumed by this boiler, in accordance with 40 CFR § 60.48c(e).

## # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall maintain the following records for this boiler:
- (1) a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ, and all documentation supporting any Initial Notification or Notification of Compliance Status submitted, as required in 40 CFR § 63.10(b)(2)(xiv);
- (2) identification of the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned to document conformance with the work practices and management practices required by 40 CFR §§ 63.11214 and 63.11223;
- (3) records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment; and
- (4) records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR § 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.
- (b) The permittee shall maintain records in a form suitable and readily available for expeditious review. The permittee shall keep each record for 5 years following the date of each recorded action. The permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years.

# V. REPORTING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.10(a)(5) and 63.11225(b)(1)–(3), and 25 Pa. Code § 127.35.]

- (a) The permittee shall prepare, by April 1 of the year after a tune-up has been completed for this boiler, and submit to the Department upon request, a compliance certification report for the previous calendar year containing the following information:
  - (1) company name and address; and
- (2) statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification; and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
  - (i) "This facility complies with the requirements in 40 CFR § 63.11223 to conduct a 5-year tune-up of each boiler";
- (ii) "This facility complies with the requirement in 40 CFR §§ 63.11214(d) and 63.11223(g) to minimize the boilers' time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturers' recommended procedures or procedures specified for a boiler of similar design if manufacturers' recommended procedures are not available."
- (b) If the boiler experiences any deviations from the applicable requirements during the reporting period, include the following in the compliance certification report in (a), above, and submit to the Department by April 1st:
  - (1) a description of deviations;
  - (2) the time periods during which the deviations occurred; and
  - (3) the corrective actions.





# 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 derived from 25 Pa. Code Chapter 122.]

- (a) The permittee shall submit records of the fuel supplier certifications for the No. 2 fuel oil consumed by this boiler, including a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the No. 2 fuel oil combusted during the reporting period, pursuant to 40 CFR § 60.48c(e)(11).
- (b) Each fuel supplier certification shall include the following information, pursuant to 40 CFR § 60.48c(f)(1):
  - (1) the name of the fuel supplier;
  - (2) a statement from the oil supplier that the oil complies with the specifications for No. 2 fuel oil in ASTM D396; and
  - (3) the sulfur content or maximum sulfur content of the No. 2 fuel oil.
- (c) Reports shall be submitted to EPA and the Department on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period.
- (d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR § 60.48c(d), (e)(11), and (j), and shall be postmarked by the 30th day following the end of the reporting period.
- (e) In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition #022(b), Section B, of this permit.

[Compliance with this streamlined permit condition assures compliance with 40 CFR §§ 60.42c(h)(1) and 60.46c(e), and 25 Pa. Code § 139.16.]

## VI. WORK PRACTICE REQUIREMENTS.

#### # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain non-resettable natural gas and No. 2 fuel oil meters for this boiler.

#### [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.11201(b) and 63.11223(a)–(c), and 25 Pa. Code § 127.35.]

- (a) The permittee shall conduct separate tune-ups of this boiler every 5 years, as follows, while consuming natural gas and No. 2 fuel oil:
- (1) as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 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 (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months 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 as follows:
- (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; and
  - (ii) a description of any corrective actions taken as a part of the tune-up of the boiler.







- (iii) The type(s) and amount(s) of fuel(s) used over the 12 months prior to the tune-up of the boiler. 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.
- (b) The permittee shall conduct each 5-year tune-up no more than 61 months after the previous tune-up.

## VII. ADDITIONAL REQUIREMENTS.

### # 017 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

This source consists of three (3) identical fire-tube steam boilers, with model no. RW1500-S-FDGO-LX, manufactured by Bryan Steam, LLC. Each boiler is equipped with flue gas recirculation, an oxygen trim system, and a natural gas- (primary fuel) and No. 2 fuel oil- (auxiliary fuel) fired low-NOx burner, model no. API-AF-350-GOX (Advanced Performance Inject-Aire, Axial Flow), manufactured by Preferred Utilities Mfg. Corp. The burners on each boiler are rated at 15 mmBtu/hr heat input (based on natural gas) and 350 boiler hp power output (nominal, based on 80% efficiency).

## # 018 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) This boiler is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart Dc, and Part 63, Subpart JJJJJJ. The boiler is a new source pursuant to 40 CFR § 63.11194(c).
- (b) In accordance with 40 CFR §§ 60.4 and 63.13, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

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







Group Name: CLEAVER BROOKS BOILERS

Group Description: Boilers 1A & 2A (21 CUP) Shared Conditions

Sources included in this group

	ID	Name
(	038	BOILER 1A (21 CUP)
(	039	BOILER 2A (21 CUP)

#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall ensure that emission into the outdoor atmosphere of PM from this boiler occurs in such a manner that the rate of the emission does not exceed 0.4 lb/mmBtu heat input.

## # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.1.]

- (a) The permittee shall ensure that the emission into the outdoor atmosphere of NOx from this boiler occurs in such a manner that the concentration of the emission does not exceed either of the following:
  - (1) 30 ppmv, dry basis, corrected to 3% O2, when consuming natural gas.
  - (2) 90 ppmv, dry basis, corrected to 3% O2, when consuming No. 2 fuel oil.
- (b) The permittee shall ensure that the emission into the outdoor atmosphere of CO from this boiler occurs in such a manner that the concentration of the emission does not exceed 300 ppmv, dry basis, corrected to 3% O2.

### # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall limit the combined NOx emissions from boiler 1A and boiler 2A (Source IDs 038 & 039) to 2.50 tons per year, calculated as a 12-month rolling sum.

This emissions cap does not provide any relief from obtaining a plan approval for any future physical change or change in the method of operation of either of the boilers, or the addition or modification of any steam-consuming processes at the facility. Future applicability determinations must consider the baseline actual emissions of the emissions units and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider boilers 1A and 2A as one emissions unit for NSR/PSD purposes, any future applicability determinations must involve both boilers (e.g., should major NSR/PSD be triggered for any one boiler or process change, BACT/LAER is required for both boilers).

### Fuel Restriction(s).

## # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 123.22(e)(2) and 127.512(h).]

- (a) The permittee shall ensure that natural gas and No. 2 fuel oil, to which there has been no reclaimed or waste oil or other waste materials added, are the only fuels consumed by this boiler.
- (b) The sulfur content of the No. 2 fuel oil consumed by the boiler shall not exceed 15 ppm (0.0015%, by weight), except as specified in 25 Pa. Code § 123.22(e)(2)(ii)–(iii).

[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.42c(d) and 25 Pa. Code § 123.22(e)(1). Compliance with (b), above, assures that the permittee will not be subject to the requirements of 40 CFR § 60.43c(e)(1).]







## Throughput Restriction(s).

## # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) Natural gas usage for Source IDs 038 and 039, combined, shall be limited to 135.3 MMCF or less on a 12-month rolling sum basis.
- (b) No. 2 fuel oil usage for Source IDs 038 and 039, combined, shall be limited to 306,570 gallons or less on a 12-month rolling sum basis.

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

#### # 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall monitor the amount and type of each fuel consumed by this boiler on a monthly basis, using non-resettable natural gas and No. 2 fuel oil meters.

### # 007 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall calculate the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, using a Department-approved method.

## IV. RECORDKEEPING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 60.48c(g)(2) and 25 Pa. Code Chapter 122.]

- (a) The permittee shall maintain records of the type and amount of each fuel consumed by this boiler on a monthly and 12-month rolling basis.
- (b) The permittee shall maintain records of the type and combined amount of each fuel consumed by boiler 1A and boiler 2A (Source IDs 038 & 039) on a monthly and 12-month rolling basis.

[Compliance with this condition and Conditions # 004 and 006, Section D (under Source ID 138), of this permit, assures that the permittee will not be subject to the PM emission limit indicated in 40 CFR Part 63, Subpart JJJJJJ, Table 1, pursuant to 40 CFR § 63.11210(f).]

## # 009 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain records of the following for this boiler (including the flue gas recirculation equipment):

- (a) inspections performed;
- (b) maintenance performed;
- (c) any deficiencies noted; and
- (d) any corrective actions taken.

#### # 010 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall maintain records of the CO, NOx, PM, SOx, VOC, and HAP emissions from this boiler on a monthly and 12-month rolling basis, calculated using a Department-approved method.
- (b) The permittee shall maintain records of the combined CO, NOx, PM, SOx, VOC, and HAP emissions from boiler 1A and boiler 2A (Source IDs 038 & 039) on a monthly and 12-month rolling basis, calculated using a Department-approved method.



#### # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(i).]

The permittee shall record each adjustment conducted (referring to annual tune-ups) for this boiler in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NOx and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.

## [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 derived from 25 Pa. Code Chapter 122.]

The permittee shall maintain records of each fuel supplier certification submittal indicating the sulfur content or maximum sulfur content of the No. 2 fuel oil consumed by this boiler, in accordance with 40 CFR § 60.48c(e).

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

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

What are my notification, reporting, and recordkeeping requirements?

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.35.]

- (a) The permittee shall maintain the following records for this boiler:
- (1) a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ, and all documentation supporting any Initial Notification or Notification of Compliance Status submitted, as required in 40 CFR § 63.10(b)(2)(xiv):
- (2) identification of the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned to document conformance with the work practices and management practices required by 40 CFR §§ 63.11214 and 63.11223;
- (3) records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment; and
- (4) records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR § 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.
- (b) The permittee shall maintain records in a form suitable and readily available for expeditious review. The permittee shall keep each record for 5 years following the date of each recorded action. The permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years.

#### V. REPORTING REQUIREMENTS.

## [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.10(a)(5) and 63.11225(b)(1)–(3), and 25 Pa. Code § 127.35.]

- (a) The permittee shall prepare, by April 1 of the year after a tune-up has been completed for this boiler, and submit to the Department upon request, a compliance certification report for the previous calendar year containing the following information:
  - (1) company name and address; and
- (2) statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification; and a statement of whether the source has complied with

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all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

- (i) "This facility complies with the requirements in 40 CFR § 63.11223 to conduct a 5-year tune-up of each boiler";
- (ii) "This facility complies with the requirement in 40 CFR §§ 63.11214(d) and 63.11223(g) to minimize the boilers' time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturers' recommended procedures or procedures specified for a boiler of similar design if manufacturers' recommended procedures are not available."
- (b) If the boiler experiences any deviations from the applicable requirements during the reporting period, include the following in the compliance certification report in (a), above, and submit to the Department by April 1st:
  - (1) a description of deviations;
  - (2) the time periods during which the deviations occurred; and
  - (3) the corrective actions.

## # 015 [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 derived from 25 Pa. Code Chapter 122.]

- (a) The permittee shall submit records of the fuel supplier certifications for the No. 2 fuel oil consumed by this boiler, including a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the No. 2 fuel oil combusted during the reporting period, pursuant to 40 CFR § 60.48c(e)(11).
- (b) Each fuel supplier certification shall include the following information, pursuant to 40 CFR § 60.48c(f)(1):
  - (1) the name of the fuel supplier;
  - (2) a statement from the oil supplier that the oil complies with the specifications for No. 2 fuel oil in ASTM D396; and
  - (3) the sulfur content or maximum sulfur content of the No. 2 fuel oil.
- (c) Reports shall be submitted to EPA and the Department on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period.
- (d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR § 60.48c(d), (e)(11), and (j), and shall be postmarked by the 30th day following the end of the reporting period.
- (e) In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

[Compliance with this streamlined permit condition assures compliance with 40 CFR §§ 60.42c(h)(1) and 60.46c(e), and 25 Pa. Code § 139.16.]

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain non-resettable natural gas and No. 2 fuel oil meters for this boiler.

## # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.11201(b) and 63.11223(a)–(c), and 25 Pa. Code § 127.35.]

- (a) The permittee shall conduct separate tune-ups of this boiler every 5 years, as follows, while consuming natural gas and No. 2 fuel oil:
- (1) as applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 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 (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months 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 as follows:
- (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; and
  - (ii) a description of any corrective actions taken as a part of the tune-up of the boiler.
- (iii) The type(s) and amount(s) of fuel(s) used over the 12 months prior to the tune-up of the boiler. 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.
- (b) The permittee shall conduct each 5-year tune-up no more than 61 months after the previous tune-up.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code § 129.112(b)(1)(ii).]

#### VII. ADDITIONAL REQUIREMENTS.

## # 018 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

This source consists of two (2) identical natural gas- (primary fuel) and No. 2 fuel oil- (auxiliary fuel) fired boilers, with model no. CBLE-200-500-150ST, manufactured by Cleaver-Brooks. Each boiler is rated at 20.412 mmBtu/hr heat input (500 boiler hp), and is equipped with low-NOx burners, flue gas recirculation, and an oxygen trim system.

# # 019 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) This boiler is subject to, and shall comply with all applicable provisions of, 40 CFR Part 60, Subpart Dc, and Part 63, Subpart JJJJJJ. The boiler is a new source pursuant to 40 CFR § 63.11194(c).
- (b) In accordance with 40 CFR §§ 60.4 and 63.13, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both EPA and the Department. The EPA copies shall be submitted as indicated in Condition # 022(b), Section B, of this permit.

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





# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.







Source Id	Source Description

033 BOILER 3

	DOILLING		
<b>Emission Limit</b>			Pollutant
9.030	Lbs/Hr		CO
35.840	Tons/Yr		CO
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
0.036	Lbs/MMBTU	Heat Input; When Consuming Natural Gas	NOX
0.110	Lbs/MMBTU	Heat Input; When Consuming No. 2 Fuel Oil	NOX
3.010	Lbs/Hr		NOX
5.400	Tons/Yr		NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
90.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
3.510	Tons/Yr		SOX
5.120	Lbs/Hr		SOX
0.360	Lbs/Hr		TSP
0.400	Lbs/MMBTU	Heat Input	TSP
1.350	Tons/Yr		TSP
0.100	Lbs/Hr		VOC
0.410	Tons/Yr		VOC

# 034 BOILER 4 CLEAVER BROOKS

<b>Emission Limit</b>			Pollutant
400.000	PPMV	Dry Basis; Corrected to 3% O2	CO
8.500	Tons/Yr	in aggregate with Source 116	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
111.840	Lbs/Day		NOX
139.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
0.400	Lbs/MMBTU	Heat Input	TSP
2.030	Tons/Yr	in aggregate with Source 116	VOC

# 035 BRYAN BOILER 1 - 15.00 MMBTU/HR

ission Limit			Pollutant
6.170	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	CO
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
2.520	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
90.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
0.400	Lbs/MMBTU	Heat Input	TSP
1.870	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	TSP
0.590	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	VOC







## Source Id Source Description

036 BRYAN BOILER 2 - 15.00 MMBTU/HR

Emission Limit			Pollutant
	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	CO
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
2.520	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
90.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
0.400	Lbs/MMBTU	Heat Input	TSP
1.870	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	TSP
0.590	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	VOC

## 037 BRYAN BOILER 3 - 15.00 MMBTU/HR

<b>Emission Limit</b>			Pollutant
	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	CO
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
2.520	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
90.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
0.400	Lbs/MMBTU	Heat Input	TSP
1.870	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	TSP
0.590	Tons/Yr	total for 3 boilers (035, 036, 037) 12-month rolling	VOC

# 038 BOILER 1A (21 CUP)

<b>Emission Limit</b>			Pollutant
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
2.500	Tons/Yr	total for 2 boilers (038, 039) 12-month rolling	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming Natural Gas	NOX
90.000	PPMV	Dry Basis; Corrected to 3% O2; When Consuming No. 2 Fuel Oil	NOX
0.400	Lbs/MMBTU	Heat Input	TSP

# 039 BOILER 2A (21 CUP)

<b>Emission Limit</b>			Pollutant
300.000	PPMV	Dry Basis; Corrected to 3% O2	CO
2.500	Tons/Yr	total for 2 boilers (038, 039) 12-month rolling	NOX
30.000	PPMV	Dry Basis; Corrected to 3% O2; When	NOX
		Consuming Natural Gas	
90.000	PPMV	Dry Basis; Corrected to 3% O2; When	NOX
		Consuming No. 2 Fuel Oil	







# Source Id Source Description

0.400 Lbs/MMBTU Heat Input TSP

# 113 DIESEL EMERGENCY GENERATOR 1000 KW

ssion Limit			Pollutant
0.540	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	CO
2.160	Lbs/Hr	From the Engine	CO
2.610	GRAMS/HP-Hr	Brake-Specific; From the Engine	CO
3.500	GRAMS/KW-Hr	Brake-Specific; From the Engine	CO
0.057	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	Hydrocarbon
0.230	Lbs/Hr	From the Engine	Hydrocarbon
3.230	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	NOX
12.910	Lbs/Hr	From the Engine	NOX
4.770	GRAMS/HP-Hr	Brake-Specific; From the Engine	NOx+NMHC
6.400	GRAMS/KW-Hr	Brake-Specific; From the Engine	NOx+NMHC
500.000	PPMV	Dry Basis	SOX
0.090	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	TSP
0.150	GRAMS/HP-Hr	Brake-Specific; From the Engine	TSP
0.200	GRAMS/KW-Hr	Brake-Specific; From the Engine	TSP
0.360	Lbs/Hr	From the Engine	TSP

# 116 CUMMINS DIESEL 1,500-EKW EMERGENCY GENERATOR SET

<b>Emission Limit</b>			Pollutant
10.000	PPMV	Dry Basis	Ammonia
0.630	Tons/Yr	12-month rolling sum	NOX
1.300	GRAMS/HP-Hr	Brake-Specific	NOX
8.500	Tons/Yr	aggregate with Source 034	NOX
500.000	PPMV	Dry Basis	SOX
0.040	gr/DRY FT3		TSP
2.030	Tons/Yr	aggregate with Source 034	VOC

# 118 NATURAL GAS GENERATOR (3.8 MW)

<b>Emission Limit</b>			Pollutant	
0.400	GRAMS/HP-Hr		CO	
4.740	Lbs/Hr		CO	
20.100	Tons/Yr	12-month rolling sum	CO	
50.600	PPMV	ppmvd @15% O2	CO	
0.180	GRAMS/HP-Hr		NOX	
2.110	Lbs/Hr		NOX	
8.970	Tons/Yr	12-month rolling sum	NOX	
13.600	PPMV	ppmvd @15% O2	NOX	
500.000	PPMV		SOX	







Source iu	Source Description			
0.040	gr/DRY FT3		TSP	
	GRAMS/HP-Hr		VOC	
0.810	Lbs/Hr		VOC	
3.440	Tons/Yr	12-month rolling sum	VOC	
15.300	PPMV	ppmvd @15% O2	VOC	

#### 119 DIESEL EMERGENCY GENERATOR (750-KW) (BLDG. 42)

nission Limit			Pollutant
0.280	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	СО
1.120	Lbs/Hr	From the Engine	CO
2.610	GRAMS/HP-Hr	Brake-Specific; From the Engine	CO
3.500	GRAMS/KW-Hr	Brake-Specific; From the Engine	CO
0.055	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	Hydrocarbon
0.220	Lbs/Hr	From the Engine	Hydrocarbon
2.410	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	NOX
9.650	Lbs/Hr	From the Engine	NOX
4.770	GRAMS/HP-Hr	Brake-Specific; From the Engine	NOx+NMHC
6.400	GRAMS/KW-Hr	Brake-Specific; From the Engine	NOx+NMHC
500.000	PPMV	Dry Basis	SOX
0.073	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	TSP
0.150	GRAMS/HP-Hr	Brake-Specific; From the Engine	TSP
0.200	GRAMS/KW-Hr	Brake-Specific; From the Engine	TSP
0.290	Lbs/Hr	From the Engine	TSP

#### DIESEL FIRE PUMPS (2) 121

mission Limit			Pollutant	
2.600	gr/HP-Hr	183 hp engine	CO	
3.700	gr/HP-Hr	86 hp engine	СО	
2.750	Tons/OZNESEAS		NOX	
6.600	Tons/Yr		NOX	
100.000	Lbs/Hr		NOX	
1,000.000	Lbs/Day		NOX	
3.000	gr/HP-Hr	183 hp engine	NOx+NMHC	
3.500	gr/HP-Hr	86 hp engine	NOx+NMHC	
0.040	gr/DRY FT3		TSP	
0.150	gr/HP-Hr	183 hp engine	TSP	
0.300	gr/HP-Hr	86 hp engine	TSP	







# Source Id Source Description

122 NG FIRED EMER. GEN. (1,468 HP)

mission Limit			Pollutant
1.460	Tons/Yr	12-Month Rolling Sum, Calculated Monthly, From the Engine	CO
4.000	GRAMS/HP-Hr	Brake-Specific; From the Engine	CO
5.860	Lbs/Hr	From the Engine	CO
540.000	PPMV	Dry Basis, Corrected to 15% O2; From the Engine	CO
1.620	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	NOX
2.000	GRAMS/HP-Hr	Brake-Specific; From the Engine	NOX
6.470	Lbs/Hr	From the Engine	NOX
160.000	PPMV	Dry Basis, Corrected to 15% O2; From the Engine	NOX
500.000	PPMV	Dry Basis	SOX
0.032	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; Excluding Formaldehyde; From the Engine	VOC
0.130	Lbs/Hr	Excluding Formaldehyde; From the Engine	VOC
1.000	GRAMS/HP-Hr	Brake-Specific; Excluding Formaldehyde; From the Engine	VOC
86.000	PPMV	Dry Basis, Corrected to 15% O2; Excluding Formaldehyde; From the Engine	VOC

# 123 1,000-EKW EMERGENCY GENERATOR SET (BUILDING 29)

<b>Emission Limit</b>			Pollutant
4.000	GRAMS/HP-Hr	Brake-Specific; From the Engine	CO
540.000	PPMV	Dry Basis, Corrected to 15% O2; From the Engine	CO
0.324	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From the Engine	NOX
2.000	GRAMS/HP-Hr	Brake-Specific; From the Engine	NOX
3.240	Lbs/Hr	From the Engine	NOX
160.000	PPMV	Dry Basis, Corrected to 15% O2; From the Engine	NOX
0.040	gr/DRY FT3		TSP
1.000	GRAMS/HP-Hr	Brake-Specific; From the Engine	VOC
86.000	PPMV	Dry Basis, Corrected to 15% O2; From the Engine	VOC

# 124 TEMP. (RENTAL) DIESEL 2,000-EKW EMERGENCY GENERATOR SETS (2)

<b>Emission Limit</b>			Pollutant
0.299	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Each Engine	CO
0.597	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Both Engines	CO
2.610	GRAMS/HP-Hr	Brake-Specific; From Each Engine	CO
3.500	GRAMS/KW-Hr	Brake-Specific; From Each Engine	CO
3.979	Lbs/Hr	From Each Engine	CO
7.959	Lbs/Hr	From Both Engines	CO
0.083	Tons/Yr	12-Month Rolling Sum, Calculated Monthly, From Each Engine	Hydrocarbon







Source Id	Source Description		
0.166	Tons/Yr	12-Month Rolling Sum, Calculated Monthly, From Both Engines	Hydrocarbon
1.110	Lbs/Hr	From Each Engine	Hydrocarbon
2.220	Lbs/Hr	From Both Engines	Hydrocarbon
3.149	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Each Engine	NOX
6.298	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Both Engines	NOX
41.987	Lbs/Hr	From Each Engine	NOX
83.974	Lbs/Hr	From Both Engines	NOX
4.770	GRAMS/HP-Hr	Brake-Specific; From Both Engines	NOx+NMHC
6.400	GRAMS/KW-Hr	Brake-Specific; From Each Engine	NOx+NMHC
0.042	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Each Engine	TSP
0.085	Tons/Yr	12-Month Rolling Sum, Calculated Monthly; From Both Engines	TSP
0.564	Lbs/Hr	From Each Engine	TSP
1.127	Lbs/Hr	From Both Engines	TSP

## **Site Emission Restriction Summary**

Emission Limit		Pollutant
89.750 Tons/Yr	calculated as 12-month rolling sum	СО
65.770 Tons/Yr	calculated as 12-month rolling sum	NOX
5.090 Tons/Yr	calculated as 12-month rolling sum	Hazardous Air Pollutants





### SECTION H. Miscellaneous.

(A) The following previously issued permits serve as the basis for certain terms and conditions set forth in this Title V Operating Permit:

OP-46-0027 Operating Permit: Facility VOC and NOx RACT

46-306-003 Operating Permit: Boiler 3 (Source ID 033)

46-302-222GP General Permit: Boiler 3

46-302-230GP General Permit: Boiler 3

Plan Approval No. 46-0027A: 1,500-ekW Emergency Generator Set (Source ID 116) with Selective Catalytic Reduction System (Source ID C116)

Plan Approval No. 46-0027B: Bryan Boilers 1, 2, and 3 (Source IDs 035, 036, and 037, respectively)

Plan Approval No. 46-0027C: 3.8-eMW Emergency Generator Set (Source ID 118) with Selective Catalytic Reduction System

(Source ID C118) and CO Oxidation Catalyst (C118A)

Plan Approval No. 46-0027D: Bryan Boilers 2 and 3

Plan Approval No. 46-0027E: Boilers 1A and 2A (Source IDs 038 and 039, respectively)

Plan Approval No. 46-0027F: Bryan Boiler 1

Plan Approval No. 46-0027G: Replacement of Selective Catalytic Reduction System (Source ID C116A) for 1,500-ekW Emergency Generator Set

Plan Approval No. 46-0027H: 1,000-ekW Emergency Generator Set (Source ID 123)

Plan Approval No. 46-0027I: Emergency Generator Sets with Previously-Exempted Engines (Source IDs 113, 119, 122, and 124)

- (B) The following sources have been determined by the Department to be insignificant sources of air emissions. The emissions from these sources are required to be aggregated to facility wide emissions on a monthly basis:
- 1) HEPA filters to control emissions; benchscale process.
- 2) Sources identified by the Department as Trivial Activities and listed in the Pennsylvania Bulletin, latest revision.
- 3) Media/Buffer Fume Hood, RFD 46-A01-2022.
- 4) Dust Collector System for Vessel Filling, RFD 46-A01-2049.
- 5) Parts Washer located in the Centocor Mechanical Room uses a citrus based solution.
- 6) Source, RFD No., Installation Date

Three 1200-ton cooling towers, 176, October 2007

Laboratory hoods, 181, October 2007

Haz-Safe waste consolidation area building, 46-A01-2560, February 2008

Economizer for boiler #4, 46-A01-2561, February 2008

- (C) March 4, 2003 AUTH ID 504083: Title V Operating Permit amendment to change monitoring and recordkeeping requirements for the scrubbing system associated with Source ID 106.
- (D) April 21, 2004 AUTH ID 355548: Title V Operating Permit amendment to incorporate requirements of Plan Approval No. 46-0027.
- (E) February 18, 2005 AUTH ID 585161: Title V Operating Permit amendment for change of ownership from Ortho-McNeil Pharmaceutical, Inc. (EIN: 22-3202158) to Johnson & Johnson Pharmaceutical Research & Development, LLC (EIN: 51-0524195).
- (F) September 13, 2005 AUTH ID 605579: Minor Operating Permit Modification to change pressure drop range for DC4 Clinical Dust Collector associated with Source ID 105 Clinical Supplies Manufacturing and Packaging.
- (G) January 26, 2006 AUTH ID 620303: Title V Operating Permit Renewal. No CAM sources at the facility. Requirements in GP No. 46-302-230GP for Boiler #3 (Source ID 033) incorporated.
- (H) April 30, 2007 AUTH 673189: Title V Operating Permit amendment to incorporate terms and conditions of Plan Approval No. 46-0027A, and corrections to the existing Title V Operating Permit.
- (I) March 14, 2008 AUTH ID 718961: Minor Operating Permit Modifications.
- (J) June 18, 2009 AUTH ID 803491: Title V Operating Permit amendment to incorporate conditions from Plan Approval No. 46-0027B for three 15.00 MMBtu/hr boilers.
- (K) February 23, 2010 AUTH ID 821009: Minor Operating Permit Modification to move Source ID 104 and associated filters (C04) from Sections A and D to Section G(B).





### SECTION H. Miscellaneous.

- (L) June 17, 2010 AUTH ID 885707: Title V Operating Permit renewal. The renewal includes facility name change from Johnson & Johnson Pharmaceutical Research and Development, LLC to Janssen Research & Development, LLC on January 3, 2012.
- (M) March 10, 2015 AUTH ID 1064934: Title V Operating Permit amendment to incorporate Plan Approval No. 46-0027C requirements (Source ID 118). Additionally, the amendment included the addition of the applicable requirements under 40 C.F.R. Part 63, Subpart JJJJJJ, for the boilers (Source IDs 031–037).
- (N) July 22, 2016 AUTH ID 1142451: Title V Operating Permit amendment to incorporate Plan Approval No. 46-0027D requirements (Source IDs 035, 036, and 037). The plan approval addressed reactivation of Source ID 037 and the replacement of burners on Source IDs 036 and 037.
- (O) January 27, 2020 AUTH ID 1201235: Title V Operating Permit renewal. The permittee is currently complying the the site-wide monitoring of visible emissions, fugitive particulate matter and objectionable odors on a monthly frequency (the Department granted this change prior to April 2013).
- The Department approves of the following two individuals as also meeting the Department's definition of a Responsible Official: David Link, EHS&S Manager, (215) 628-7116; and James Lilly, Engineering & Property Services Manager, (610) 496-0474

The following RFDs were submitted and approved by the Department:

- 6581 (10-10-2017) for the installation of a pharmacological spray dryer system;
- 6739 (11-20-2017) for an upgrade to the control system on Boiler 3 (Source ID 033);
- 6807 (1-16-2018) for the installation and operation of an aerosol can cleaning system;
- 6354 (6-1-2017) for the installation of an approximate 1,468 HP natural gas-fired emergency generator (Source ID 122);
- 7241 (10-1-2018) for the installation of a temporary use gasoline-fired emergency generator at corporate events through out the year;
- 5252 (8-19-2015) 183 HP fire pump engine (Fire Pump House Replacement) (Source ID 121);
- 4852 (12-9-2014) 86 HP fire Pump (Source ID 121); and
- 3783 (7-15-2013) 1,102 HP diesel Fuel-Fired Emergency Generator (Source ID 119).
- (P) April 9, 2021 AUTH IDs 1332913 and 1348583: Title V Operating Permit amendment to incorporate terms and conditions of Plan Approval Nos. 46-0027E and 46-0027F, respectively, and corrections to the existing Title V Operating Permit. In addition, as a result of a U.S. Environmental Protection Agency (EPA) order responding to petitions submitted to EPA by the Sierra Club, Little Blue Regional Action Group, Environmental Integrity Project, Group Against Smog and Pollution, and the Clean Air Council objecting to Title V Operating Permits previously issued by the Department for the Homer City and Bruce Mansfield coal-fired electric generating facilities (Nos. 32-00055 and 04-00235, respectively), the Department has incorporated Plan Approval No. 46-0027G for replacement of the SCR system (Source ID C116 —> Source ID C116A) for an existing 1,500-ekW emergency generator set (Source ID 116) into this Title V Operating Permit by reference.
- (Q) April 28, 2023 AUTH ID 1433582: Title V Operating Permit amendment to incorporate terms and conditions of Plan Approval Nos. 46-0027G, 46-0027H, and 46-0027I.
- (R) AUTH ID 1486256: Title V Operating Permit renewed. The Responsible Official on the cover page of this permit has been changed from Elizabeth Hammonds, Senior Manager EHS & Sustainability, (215) 628-5260, to David Link, EHS&S Manager, (215) 628-7116. Elizabeth Hammonds continues to meet the Department's definition for Responsible Official and remains an alternate designated Responsible Official for this permit.
- (S) AUTH ID 1529366. A minor modification is being processed to incorporate presumptive RACT 3 requirements for affected sources.





\*\*\*\*\* End of Report \*\*\*\*\*