



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

TITLE V/STATE OPERATING PERMIT

Issue Date: March 5, 2020

Effective Date: March 5, 2020

Expiration Date: March 4, 2025

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: 40-00129

Federal Tax Id - Plant Code: 37-1751759-1

Owner Information

Name: MOXIE FREEDOM LLC DBA CAITHNESS MOXIE FREEDOM
Mailing Address: 565 5TH AVE FL 29
NEW YORK, NY 10017-2478

Plant Information

Plant: CAITHNESS MOXIE FREEDOM GENERATION PLANT/SALEM TWP
Location: 40 Luzerne County 40964 Salem Township
SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: GARY KEEVILL
Title: SR VP, BUS ENERGY MGMT
Phone: (212) 921 - 9099

Permit Contact Person

Name: THOMAS GRACE
Title: DIR OF EHS
Phone: (484) 533 - 0932

[Signature] _____
MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents
Site Inventory List

Section B. General Title V Requirements

- #001 Definitions
- #002 Prohibition of Air Pollution
- #003 Property Rights
- #004 Permit Expiration
- #005 Permit Renewal
- #006 Transfer of Ownership or Operational Control
- #007 Inspection and Entry
- #008 Compliance Requirements
- #009 Need to Halt or Reduce Activity Not a Defense
- #010 Duty to Provide Information
- #011 Reopening and Revising the Title V Permit for Cause
- #012 Reopening a Title V Permit for Cause by EPA
- #013 Operating Permit Application Review by the EPA
- #014 Significant Operating Permit Modifications
- #015 Minor Operating Permit Modifications
- #016 Administrative Operating Permit Amendments
- #017 Severability Clause
- #018 Fee Payment
- #019 Authorization for De Minimis Emission Increases
- #020 Reactivation of Sources
- #021 Circumvention
- #022 Submissions
- #023 Sampling, Testing and Monitoring Procedures
- #024 Recordkeeping Requirements
- #025 Reporting Requirements
- #026 Compliance Certification
- #027 Operational Flexibility
- #028 Risk Management
- #029 Approved Economic Incentives and Emission Trading Programs
- #030 Permit Shield
- #031 Reporting
- #032 Report Format

Section C. Site Level Title V Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level Title V Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements



SECTION A. Table of Contents

D-VI: Work Practice Standards
D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

E-I: Restrictions
E-II: Testing Requirements
E-III: Monitoring Requirements
E-IV: Recordkeeping Requirements
E-V: Reporting Requirements
E-VI: Work Practice Standards
E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

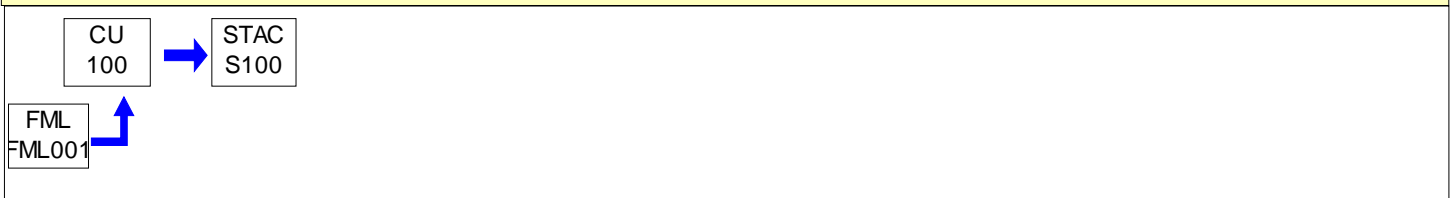
F-I: Restrictions
F-II: Testing Requirements
F-III: Monitoring Requirements
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

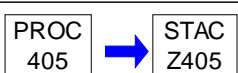
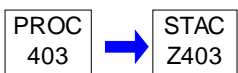
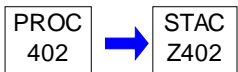
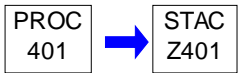
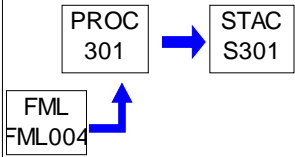
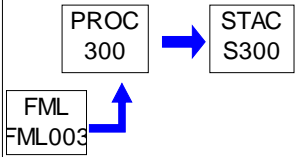
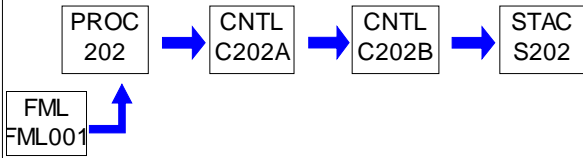
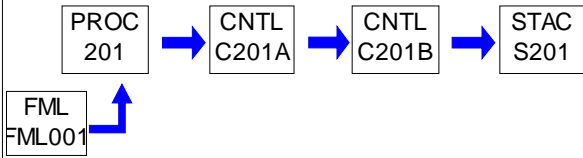
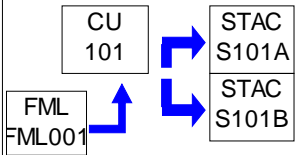
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
100	AUXILIARY BOILER	55.400 MMBTU/HR	
101	FUEL GAS HEATER (DUAL BURNER)	14.600 MMBTU/HR	
201	COMBUSTION TURBINE/DUCT BURNER UNIT 1	3,529.000 MMBTU/HR	
202	COMBUSTION TURBINE/DUCT BURNER UNIT 2	3,529.000 MMBTU/HR	
300	EMERGENCY GENERATOR (1000KW)		
301	FIRE ENGINE PUMP (510 BHP)		
401	LUBRICATION OIL TANK #1 (16000 GAL)		
402	LUBRICATION OIL TANK #2 (16000 GAL)		
403	DIESEL STORAGE TANK (1600 GAL)		
404	DIESEL FIRE PUMP DAY STORAGE TANK (300 GAL)		
405	AQUEOUS AMMONIA STORAGE TANK (20000 GAL)		
C201A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 1		
C201B	OXIDATION CATALYST CT/DB UNIT 1		
C202A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 2		
C202B	OXIDATION CATALYST CT/DB UNIT2		
FML001	NATURAL GAS		
FML003	DIESEL FUEL 1600 GAL TANK		
FML004	DIESEL FUEL 300 GAL TANK		
S100	AUXILIARY BOILER STACK		
S101A	HEATER STACK 1		
S101B	HEATER STACK 2		
S201	CT/DB UNIT 1 STACK		
S202	CT/DB UNIT 2 STACK		
S300	EMERGENCY GENERATOR STACK		
S301	FIRE ENGINE PUMP STACK		
Z401	LUB OIL TANK #1 FUGITIVE		
Z402	LUB OIL TANK #2 FUGITIVE		
Z403	DIESEL STORAGE TANK FUGITIVE		
Z404	FIRE PUMP DIESEL STOARGE TANK FUGITIVE		
Z405	AMMONIA TANK FUGITIVE		

PERMIT MAPS



PERMIT MAPS



**SECTION B. General Title V Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

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

#002 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

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

#003 [25 Pa. Code § 127.512(c)(4)]**Property Rights**

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

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

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

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]**Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]**Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

- (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

**SECTION B. General Title V Requirements**

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

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

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
- (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

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

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]**Need to Halt or Reduce Activity Not a Defense**

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

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]**Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or

**SECTION B. General Title V Requirements**

to determine compliance with the permit.

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

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]**Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]**Reopening a Title V Permit for Cause by EPA**

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

#013 [25 Pa. Code § 127.522(a)]**Operating Permit Application Review by the EPA**

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

R3_Air_Apps_and_Notices@epa.gov

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

#014 [25 Pa. Code § 127.541]**Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with

**SECTION B. General Title V Requirements**

25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(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.

#017 [25 Pa. Code § 127.512(b)]**Severability Clause**

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

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

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

**SECTION B. General Title V Requirements**

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

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

#019 [25 Pa. Code §§ 127.14(b) & 127.449]**Authorization for De Minimis Emission Increases**

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

- (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

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

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
- (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
- (4) Space heaters which heat by direct heat transfer.

**SECTION B. General Title V Requirements**

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]**Reactivation of Sources**

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

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

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

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

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

**SECTION B. General Title V Requirements**

the device or technique may be used for control of malodors.

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

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

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter,
or otherwise notified)

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

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

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

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

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

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

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

**SECTION B. General Title V Requirements**

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

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

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#026 [25 Pa. Code § 127.513]**Compliance Certification**

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

#027 [25 Pa. Code § 127.3]**Operational Flexibility**

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

- (1) Section 127.14 (relating to exemptions)

**SECTION B. General Title V Requirements**

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

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

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
 - (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
 - (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
 - (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
- (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

**SECTION B. General Title V Requirements**

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]**Approved Economic Incentives and Emission Trading Programs**

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

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

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

- (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
- (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
- (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#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.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

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

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

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

(1) Construction or demolition of buildings or structures.

(2) Grading, 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.

(7) N/A

(8) N/A

(9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) the emissions are of minor significance with respect to causing air pollution; and

(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

(b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

(c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.

(2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

(3) Paving and maintenance of roadways.

**SECTION C. Site Level Requirements**

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

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 123.1(a)(1) -- (9) (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**

The permittee may not allow 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 permittee's property.

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:

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

006 [25 Pa. Code §123.42]**Exceptions**

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

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
- (4) N/A

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

Performance testing shall be conducted as follows:

(a) The Permittee shall submit three copies of a pre-test protocol to the Department for review at least 45 days prior to the performance of any EPA reference method stack test. The Permittee shall submit three copies of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

**SECTION C. Site Level Requirements**

- (b) The Permittee shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR Part 60.8(a), a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.
- (d) Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
 - (2) Permit number(s) and condition(s) which are the basis for the evaluation.
 - (3) Summary of results with respect to each applicable permit condition.
 - (4) Statement of compliance or non-compliance with each applicable permit condition.
- (e) Pursuant to 25 Pa. Code § 139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (g) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through <https://www.depgreenport.state.pa.us/ecom/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.
- (h) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

008 [25 Pa. Code §139.1]**Sampling facilities.**

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

009 [25 Pa. Code §139.11]**General requirements.**

The following are applicable to source tests for determining emissions from stationary sources:

- (1) Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.
- (2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:

**SECTION C. Site Level Requirements**

- (i) A thorough source description, including a description of any air cleaning devices and the flue.
- (ii) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
- (iii) The location of the sampling ports.
- (iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO₂, O₂ and N₂), static and barometric pressures.
- (v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (vi) Laboratory procedures and results.
- (vii) Calculated results.

III. MONITORING REQUIREMENTS.**# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

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

The permittee shall conduct a facility-wide inspection for the presence of any visible stack emissions, fugitive emissions, and any potentially objectionable odors at the property line at a minimum of once each operating day, during daylight hours, and while the sources are operating. If visible stack emissions, fugitive emissions, and/or potentially objectionable odors are apparent, the permittee shall take corrective action. Records of each inspection shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

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

The permittee shall implement a sulfur hexafluoride (SF₆) leak detection program to minimize SF₆ leaks as follows:

- (a) Circuit breakers are to be state-of-the-art sealed enclosed-pressure circuit breakers equipped with low-pressure alarms that are triggered when 10% of the SF₆ by weight has escaped.
- (b) When alarms are triggered, the facility shall take corrective action as soon as practicable to fix the circuit breaker units to a like-new state to prevent the emission of SF₆ to the maximum extent possible.

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

The permittee shall maintain the following comprehensive and accurate records:

- (a) Amount of fuel used by each combustion unit, engine, and turbine on a 12-month rolling basis.
- (b) Hours of operation of each source on a 12-month rolling basis.
- (c) Results of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.

**SECTION C. Site Level Requirements**

- (d) Copies of the manufacturer's recommended maintenance schedule for each air source and air cleaning device.
- (e) All maintenance performed on each source and air cleaning device.
- (f) Copies of the current, valid purchase contract, tariff sheet, or transportation contract obtained from the natural gas supplier with the sulfur content of the natural gas.
- (g) Results of the annual natural gas sulfur content analyses.
- (h) Amount of sulfur hexafluoride (SF6) dielectric fluid added to each circuit breaker unit on a monthly basis.
- (i) The date and time that each alarm associated with the circuit breaker is activated, the corrective action taken to remedy the problem associated with each alarm, and the date the corrective action remedied the problem.

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

All logs and required records shall be maintained on site, or at an alternative location acceptable to the Department, for a minimum of five years and shall be made available to the Department upon request.

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

The annual emission report shall include all emissions information for all previously reported sources and new sources which were first operated during the preceding calendar year. Emissions data including, but not limited to the following, shall be reported: carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter less than 10 micrometers in diameter (PM10), particulate matter less than 2.5 micrometers in diameter (PM2.5), sulfur dioxide (SO2), volatile organic compounds including formaldehyde (VOC), total hazardous air pollutants (HAP), speciated individual HAP emissions, sulfuric acid mist (H2SO4), and greenhouse gases, expressed as CO2e. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

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

Malfunction reporting shall be conducted as follows:

- (a) For purpose of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or source to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Examples of malfunctions may include, but are not limited to: large dust plumes, heavy smoke, a spill or release that results in a malodor that is detectable outside the property of the person on whose land the source is being operated.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety or the environment, the notification shall be submitted to the Department no later than one hour after the incident commences.
- (c) All other malfunctions that must be reported under subsection (a) shall be reported to the Department no later than the next business day.
- (d) The report shall describe the:
 - (1) Name and location of the facility;
 - (2) Nature and cause of the malfunction or breakdown;
 - (3) Time when the malfunction or breakdown was first observed;
 - (4) Expected duration of excess emissions; and
 - (5) Estimated rate of emissions.
- (e) Malfunctions shall be reported to the Department at the following address:

PA DEP
Office of Air Quality
2 Public Square
Wilkes Barre, PA 18711
570-826-2511

**SECTION C. Site Level Requirements**

(f) The owner or operator shall notify the Department immediately upon completion when corrective measures have been accomplished.

(g) Subsequent to the malfunction, the owner/operator shall submit a full written report to the Department including the items identified in (d) and corrective measures taken on the malfunction within 15 days, if requested.

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

The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subparts Db, III, and KKKK and National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding the engines shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

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

PA DEP
Air Quality Program
2 Public Square
Wilkes Barre, PA 18711

If performance tests are required for Subpart NSPS JJJJ and MACT, ZZZZ, any such test reports are to be submitted the Region III e-mail Box R3 Subpart JJJJ.

Any NSPS and MACT reports submitted electronically should be submitted to EPA's Central Data Exchange:
<https://cdx.epa.gov/>

018 [25 Pa. Code §135.3]**Reporting**

Annual emissions reporting shall be conducted as follows:

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall operate and maintain all air contamination sources and air cleaning devices in accordance with the manufacturer's specifications and recommended maintenance schedules.

**SECTION C. Site Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 020 [25 Pa. Code §127.205]****Special permit requirements.**

The ERCs from Plan Approval No. 40-00129B are to be used to satisfy emission offset requirements in accordance with 25 Pa. Code Section 127.206 to 127.210 and Plan Approval No. 40-00129A, for the NO_x and VOCs emissions increase from the proposed facility.

021 [25 Pa. Code §127.208]**ERC use and transfer requirements.**

(a) Upon the issuance of Plan Approval No. 40-00129B and the transfer of the ERCs to Moxie Freedom LLC, the ERCs are no longer subject to expiration under 25 Pa. Code Section 127.206(f), except as specified in 25 Pa. Code Section 127.206(g). If the NO_x and VOC ERCs identified in Plan Approval No. 40-00129B are not used and subsequently reentered into the ERC registry, the applicable 10-year expiration date may not be extended.

022 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) Plan Approval No. 40-00129B was granted solely for the transfer and use of ERCs according to 25 Pa. Code Section 127.208(2), and does not authorize a person to construct, modify, or reactivate an air contaminant source or allow for the installation of an air cleaning device on an air contaminant source.

(b) Plan Approval No. 40-00129B authorized the transfer and use of 247 tpy of NO_x ERCs from First Energy Solutions Corporation, s Armstrong County, Pennsylvania facility and 90 tpy of VOC ERCs from Graphic Packaging's Saratoga Springs, Saratoga County, New York facility for offset purposes to meet the requirements of 25 Pa. Code Chapter 127.

023 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The Department will evaluate the actual emission rates and may revise the allowable emission limitations based upon demonstrated performance (CEMS data, stack tests results), and/or subsequently promulgated applicable requirements at any time of operation. Any revision of the allowable emission limitations shall be by minor modification provided that the revised allowable emission limitations do not exceed levels at which the lowest achievable emission rate (LAER), best available control technology (BACT) and best available technology (BAT) were evaluated, do not exceed the level at which the facility impacts were modeled, and that are not a result of a physical change or change in method of operation at the facility.

024 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

In accordance with 25 Pa. Code § 127.201 through § 127.217, the permittee shall secure 247 tons per year of NO_x emission reduction credits (ERCs) and 90 tons per year of VOC ERCs. The ERCs shall be properly generated, certified by the Department, and processed through the registry no later than the date approved by the Department for commencement of operation of the proposed facility.

025 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

If, at any time, the Department has cause to believe that air contaminant emissions may be in excess of the limitations specified in, or established pursuant to this operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

026 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

Air contamination sources and air cleaning devices authorized for operation include:

- Two (2) 3,329 MMBtu/hr 7HA.02 General Electric (GE) Single Shaft combined cycle combustion turbines each serving one steam turbine generator equipped with heat recovery steam generators (HRSG) each with supplemental 200 MMBtu/hr natural gas fired duct burners; controlled by SCR and oxidation catalysts.
- One (1) 55.4 MMBtu/hr natural gas-fired auxiliary boiler.
- One (1) 1,000 kW diesel-fired emergency generator engine.
- One (1) 510 bhp diesel-fired emergency fire pump engine.

**SECTION C. Site Level Requirements**

<ul style="list-style-type: none"> • One (1) 14.6 MMBtu/hr dual burner heater
<p># 027 [25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall comply with the cross-state air pollution rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA-DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA-DDDDD, as amended.</p>
<p># 028 [25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall comply with all applicable requirements under 40 CFR Parts 72-78 related to the Acid Rain Program.</p>
<p># 029 [25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall comply with all applicable requirements under 40 CFR Part 64 related to Compliance Assurance Monitoring (CAM).</p>
<p># 030 [25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall comply with all applicable requirements under 40 CFR Part 68 related to the Chemical Accident Prevention Provisions.</p>
<p># 031 [25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall comply with all applicable requirements of New Source Performance Standards from 40 CFR Part 60 Subparts Db, IIII, and KKKK and National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ.</p>
<p># 032 [25 Pa. Code §129.14] Open burning operations The permittee shall not permit the open burning of materials at this facility unless in accordance with 25 Pa. Code Section 129.14.</p>

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

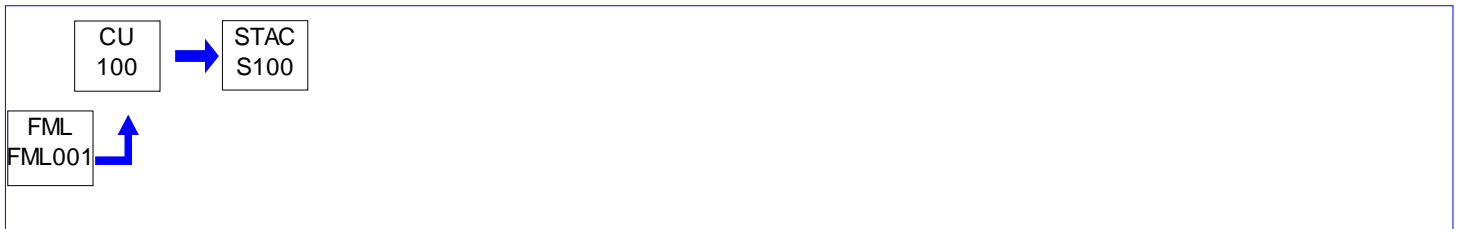
***** Permit Shield In Effect *****

**SECTION D. Source Level Requirements**

Source ID: 100

Source Name: AUXILIARY BOILER

Source Capacity/Throughput: 55.400 MMBTU/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The emissions from the auxiliary boiler shall not exceed the following:

- (a) NO_x: 0.006 lb/MMBtu or 0.66 tpy on a 12-month rolling basis.
- (b) CO: 0.037 lb/MMBtu or 4.10 tpy on a 12-month rolling basis.
- (c) VOC: 0.005 lb/MMBtu or 0.554 tpy on a 12-month rolling basis.
- (d) Total PM: 0.007 lb/MMBtu or 0.775 tpy on a 12-month rolling basis.
- (e) Total PM₁₀: 0.007 lb/MMBtu or 0.775 tpy on a 12-month rolling basis.
- (f) Total PM_{2.5}: 0.007 lb/MMBtu or 0.775 tpy on a 12-month rolling basis.
- (g) H₂SO₄: 0.00013 lb/MMBtu or 1.49E-02 tpy on a 12-month rolling basis.
- (h) SO₂: 0.0011 lb/MMBtu or 0.122 tpy on a 12-month rolling basis.
- (i) GHG: 13,561 tpy on a 12-month rolling basis.

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

[Authority for the SO₂ emission limit is also derived from 25 PA Code Chapter 123.22]

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

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

The permittee shall not allow 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 10% for a period or periods aggregating more than 3 minutes in any one hour.
- (b) Equal to or greater than 30% at any time.

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

The combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Small Combustion Unit Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- a. The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage.

**SECTION D. Source Level Requirements**

b. N/A

c. The permittee shall maintain daily fuel consumption records in accordance with 40 CFR 60.48c(g) (this applies to gas units). Records shall be kept for the fuel firing rates of the combustion unit on a monthly basis.

d. N/A

e. Pursuant to 40 CFR 60.4, the permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to:

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

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

Combustion Units Constructed after December 2, 1995, with Rated Capacity Equal to or Greater than 10 Million Btu per Hour.

As a condition of this Small Combustion Unit Permit, the permittee shall construct qualifying small gas combustion units capable of reducing nitrogen oxides (NOx) and carbon monoxide (CO) emissions to or below:

- i. 30 ppm_{dv} NO_x at 3% O₂ when firing gas;
- ii. 300 ppm_{dv} CO at 3% O₂.

The combustion unit(s) shall be fired only on natural gas or liquefied petroleum gas

Throughput Restriction(s).**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Total fuel usage of the auxiliary boiler shall not exceed 214.9 MMscf on a 12-month rolling basis.

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

The permittee shall, upon the request of the Department, provide fuel analyses, or fuel samples of the fuel used in any combustion unit authorized to operate under this permit.

If, at any time, the Department has cause to believe that air contaminant emissions from a combustion unit covered by this permit are in excess of the limitations specified in, or established pursuant to, any applicable regulation contained in 25 Pa. Code, Subpart C, Article III, the permittee shall conduct tests deemed necessary by the Department to determine the actual emission rate(s).

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

The permittee shall monitor the fuel usage of the auxiliary boiler and maintain records of the 12 month rolling sum of fuel usage.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records demonstrating compliance with the emission limits established in this permit for the auxiliary boiler. The records shall be maintained in a 12 month rolling sum format for each pollutant.

Additionally the permittee shall maintain records of the 12 month rolling sum of fuel usage of the auxiliary boiler.

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

The permittee shall comply with applicable monitoring, recordkeeping and reporting requirements set forth in 25 Pa. Code Chapter 139 (relating to sampling and testing), the Air Pollution Control Act, the Clean Air Act, and the applicable regulations under the acts.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

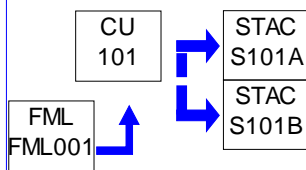
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: FUEL GAS HEATER (DUAL BURNER)

Source Capacity/Throughput: 14.600 MMBTU/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The emissions from the fuel gas heater shall not exceed the following:

- (a) NO_x: 0.011 lb/MMBtu or 0.70 tpy on a 12-month rolling basis.
- (b) CO: 0.037 lb/MMBtu or 2.37 tpy on a 12-month rolling basis.
- (c) VOC: 0.005 lb/MMBtu or 0.32 tpy on a 12-month rolling basis.
- (d) Total PM: 0.007 lb/MMBtu or 0.45 tpy on a 12-month rolling basis.
- (e) Total PM₁₀: 0.007 lb/MMBtu or 0.45 tpy on a 12-month rolling basis.
- (f) Total PM_{2.5}: 0.007 lb/MMBtu or 0.45 tpy on a 12-month rolling basis.
- (g) H₂SO₄: 0.00013 lb/MMBtu or 0.01 tpy on a 12-month rolling basis.
- (h) SO₂: 0.0011 lb/MMBtu or 0.07 tpy on a 12-month rolling basis.
- (i) GHG: 7,845 tpy on a 12-month rolling basis.

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

[Authority for the SO₂ emission limit is also derived from 25 PA Code Chapter 123.22]

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

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

The combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Small Combustion Unit Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- a. The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage.
- b. N/A
- c. The permittee shall maintain daily fuel consumption records in accordance with 40 CFR 60.48c(g) (this applies to gas units). Records shall be kept for the fuel firing rates of the combustion unit on a monthly basis.
- d. N/A
- e. Pursuant to 40 CFR 60.4, the permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to:

Chief, Air Section

**SECTION D. Source Level Requirements**

Enforcement & Compliance Assurance Division
 Air, RCRA and Toxics Branch
 US EPA Region 3
 1650 Arch Street – 3ED21
 Philadelphia, PA 19103

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

Combustion Units Constructed after December 2, 1995, with Rated Capacity Equal to or Greater than 10 Million Btu per Hour.

As a condition of this Small Combustion Unit Permit, the permittee shall construct qualifying small gas combustion units capable of reducing nitrogen oxides (NOx) and carbon monoxide (CO) emissions to or below:

- i. 30 ppmdv NOx at 3% O2 when firing gas;
- ii. 300 ppmdv CO at 3% O2.

The combustion unit(s) shall be fired only on natural gas or liquefied petroleum gas

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

Total fuel usage of the fuel gas heater shall not exceed 124.3 MMscf on a 12-month rolling basis.

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

The permittee shall, upon the request of the Department, provide fuel analyses, or fuel samples of the fuel used in any combustion unit authorized to operate under this permit.

If, at any time, the Department has cause to believe that air contaminant emissions from a combustion unit covered by this permit are in excess of the limitations specified in, or established pursuant to, any applicable regulation contained in 25 Pa. Code, Subpart C, Article III, the permittee shall conduct tests deemed necessary by the Department to determine the actual emission rate(s).

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

The permittee shall monitor the fuel usage of the fuel gas heater and maintain records of the 12 month rolling sum of fuel usage.

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

The permittee shall comply with applicable monitoring, recordkeeping and reporting requirements set forth in 25 Pa. Code Chapter 139 (relating to sampling and testing), the Air Pollution Control Act, the Clean Air Act, and the applicable regulations under the acts.

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

The permittee shall maintain records demonstrating compliance with the emission limits established in this permit for the fuel gas heater. The records shall be maintained in a 12 month rolling sum format for each pollutant.



SECTION D. Source Level Requirements

Additionally the permittee shall maintain records of the 12 month rolling sum of fuel usage of the fuel gas heater.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

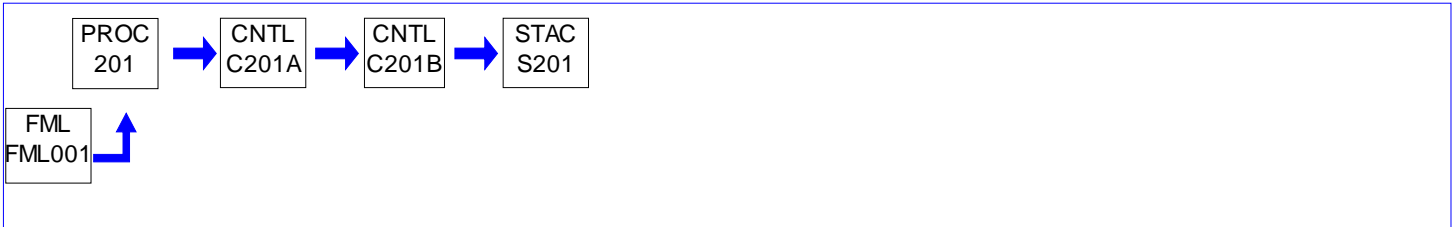
**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: COMBUSTION TURBINE/DUCT BURNER UNIT 1

Source Capacity/Throughput: 3,529.000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 1
GROUP 2

**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. *****

**SECTION D. Source Level Requirements**

Source ID: 202

Source Name: COMBUSTION TURBINE/DUCT BURNER UNIT 2

Source Capacity/Throughput: 3,529.000 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 1
GROUP 2

**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. *****

**SECTION D. Source Level Requirements**

Source ID: 300

Source Name: EMERGENCY GENERATOR (1000KW)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 3

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The emissions from the emergency diesel generator shall not exceed the following:

- (a) NO_x: 4.93 g/hp-hr or 0.40 tpy on a 12-month rolling basis.
- (b) CO: 0.26 g/hp-hr or 0.083 tpy on a 12-month rolling basis.
- (c) VOC: 0.02 g/hp-hr or 0.002 tpy on a 12-month rolling basis.
- (d) Total PM: 0.040 g/hp-hr or 0.003 tpy on a 12-month rolling basis.
- (e) Total PM₁₀: 0.040 g/hp-hr or 0.003 tpy on a 12-month rolling basis.
- (f) Total PM_{2.5}: 0.040 g/hp-hr or 0.003 tpy on a 12-month rolling basis.
- (g) SO₂: 0.0055 g/hp-hr or 4.41E-04 tpy on a 12-month rolling basis.
- (i) GHG: 44 tpy on a 12-month rolling basis.
- (j) H₂SO₄: 6.74E-04 g/hp-hr or 5.41E-05 tpy on a 12-month rolling basis

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

[Authority for the SO₂ emission limit is also derived from 25 PA Code Chapter 123.22]

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

Fuel Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Sulfur content of the diesel fuel combusted by the emergency diesel generator shall not exceed 15 ppm.

Operation Hours Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following operating restrictions, used in NO₂ modeling, included the following:

- i. The duration of each test of the emergency generator will not exceed 30 minutes or such other duration as dictated by utility practice or the manufacturer.
- ii. The emergency generator and the fire pump will not be tested simultaneously (within the same hour).
- iii. The emergency generator will not be tested during (in the same hour as) startup or shutdown of the combustion

**SECTION D. Source Level Requirements**

turbines.

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

The permittee shall maintain records demonstrating compliance with the conditions of this permit. These records shall be made available to the Department upon request and maintained for a period of five (5) years.

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

The permittee shall maintain records of the fuel certification reports for each delivery of fuel to verify compliance with the fuel restriction 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) 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.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart IIII.

007 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee meets the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII.

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

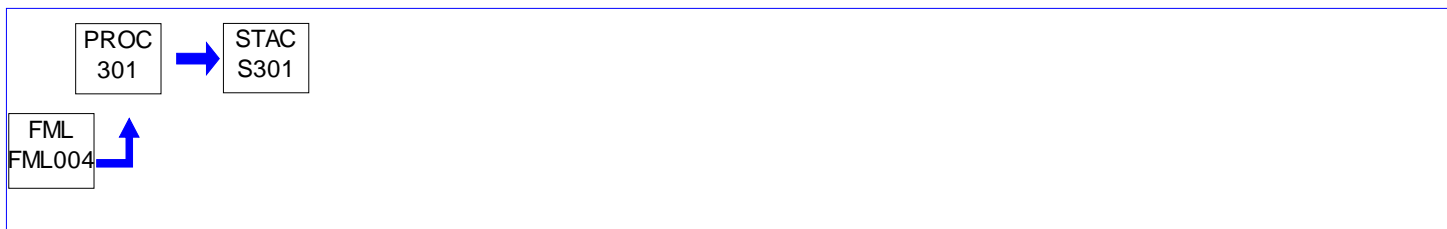
**SECTION D. Source Level Requirements**

Source ID: 301

Source Name: FIRE ENGINE PUMP (510 BHP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 3

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The emissions from the emergency fire pump engine shall not exceed the following:

- (a) NO_x: 3.0 g/hp-hr or 0.08 tpy on a 12-month rolling basis.
- (b) CO: 1.0 g/hp-hr or 0.028 tpy on a 12-month rolling basis.
- (c) VOC: 0.2 g/hp-hr or 0.006 tpy on a 12-month rolling basis.
- (d) Total PM: 0.20 g/hp-hr or 0.006 tpy on a 12-month rolling basis.
- (e) Total PM₁₀: 0.20 g/hp-hr or 0.006 tpy on a 12-month rolling basis.
- (f) Total PM_{2.5}: 0.20 g/hp-hr or 0.006 tpy on a 12-month rolling basis.
- (g) SO₂: 0.0055 g/hp-hr or 1.5E-04 tpy on a 12-month rolling basis.
- (i) GHG: 14 tpy on a 12-month rolling basis.

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

[Authority for the SO₂ emission limit is also derived from 25 PA Code Chapter 123.22]

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

Fuel Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Sulfur content of the diesel fuel combusted by the fire pump engine shall not exceed 15 ppm.

Operation Hours Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following operating restrictions, used in NO₂ modeling, included the following:

- i. The duration of each test of the fire engine pump will not exceed 30 minutes or such other duration as dictated by utility practice or the manufacturer.
- ii. The fire engine pump and the fire pump will not be tested simultaneously (within the same hour).

**SECTION D. Source Level Requirements**

iii. The fire engine pump will not be tested during (in the same hour as) startup or shutdown of the combustion turbines.

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.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the fuel certification reports for each delivery of fuel to verify compliance with the fuel restriction requirements.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records demonstrating compliance with the conditions of this permit. These records shall be made available to the Department upon request and maintained for a period of five (5) years.

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.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart IIII.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Compliance with 40 CFR Part 60, Subpart IIII assures compliance with 40 CFR Part 63, Subpart ZZZZ.

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

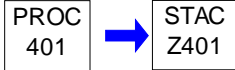
**SECTION D. Source Level Requirements**

Source ID: 401

Source Name: LUBRICATION OIL TANK #1 (16000 GAL)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**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. *****

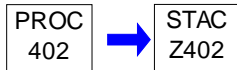
**SECTION D. Source Level Requirements**

Source ID: 402

Source Name: LUBRICATION OIL TANK #2 (16000 GAL)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**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. *****

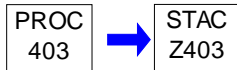
**SECTION D. Source Level Requirements**

Source ID: 403

Source Name: DIESEL STORAGE TANK (1600 GAL)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**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. *****

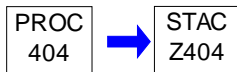
**SECTION D. Source Level Requirements**

Source ID: 404

Source Name: DIESEL FIRE PUMP DAY STORAGE TANK (300 GAL)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**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. *****

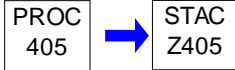
**SECTION D. Source Level Requirements**

Source ID: 405

Source Name: AQUEOUS AMMONIA STORAGE TANK (20000 GAL)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 4

**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. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1

Group Description: Combined Cycle Power Block

Sources included in this group

ID	Name
201	COMBUSTION TURBINE/DUCT BURNER UNIT 1
202	COMBUSTION TURBINE/DUCT BURNER UNIT 2
C201A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 1
C201B	OXIDATION CATALYST CT/DB UNIT 1
C202A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 2
C202B	OXIDATION CATALYST CT/DB UNIT 2

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Definitions:

- (a) Startup is defined as the period beginning when fuel begins flowing to the combustion turbine and ending when the combustion process, air pollution control equipment, and associated control systems have attained normal operating conditions.
- (b) Shutdown is defined as the period beginning when the combustion turbine exits DLN mode and ending when fuel flow ceases.
- (c) Normal operation is defined as all times except startup and shutdown.
- (d) Hot startup is defined as a startup at less than or equal to 8 hours offline.
- (e) Warm startup is defined as a startup at greater than 8 hours offline and less than or equal to 72 hours offline.
- (f) Cold startup is defined as a startup at greater than 72 hours offline.

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

During normal operation, emissions from each combined cycle combustion turbine, Source IDs 201 and 202, shall not exceed:

- (a) Nitrogen Oxides (NO_x):
 - (1) 2.0 ppmvd @ 15% O₂
 - (2) 24.2 lb/hr without duct burner
 - (3) 25.7 lb/hr with duct burner
- (b) Carbon Monoxide (CO):
 - (1) 2.0 ppmvd @ 15% O₂
 - (2) 14.7 lb/hr without duct burner
 - (3) 15.6 lb/hr with duct burner
- (c) Volatile Organic Compounds (VOC):
 - (1) 1.5 ppmvd @ 15% O₂ with duct burners
 - (2) 1.0 ppmvd @ 15% O₂ without duct burners
 - (3) 4.2 lb/hr without duct burner
 - (4) 8.93 lb/hr with duct burner

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

- (d) Total Particulate Matter (PM):
 - (1) 0.0063 lb/MMBtu (Natural Gas, using EPA Reference Methods 5 or EPA revised methods)
 - (2) 11.7 lb/hr without duct burner
 - (3) 13.9 lb/hr with duct burner

**SECTION E. Source Group Restrictions.**

- (e) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM10):
 (1) 0.0063 lb/MMBtu (Natural Gas, using EPA Reference Methods 201A and 202 or EPA revised methods)
 (2) 11.7 lb/hr without duct burner
 (3) 13.9 with duct burner
- (f) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM2.5):
 (1) 0.0063 lb/MMBtu (Natural Gas, using EPA Reference Methods 201A and 202 or EPA revised methods)
 (2) 11.7 lb/hr without duct burner
 (3) 13.9 lb/hr with duct burner
- (g) Sulfuric Acid Mist (H₂SO₄):
 (1) 8.60E-04 lb/MMBtu
 (2) 2.9 lb/hr without duct burner
 (3) 3.06 lb/hr with duct burner
- (h) Sulfur Dioxide (SO₂):
 (1) 4.452 lb/hr without duct burner
 (2) 4.74 lb/hr with duct burner
- (i) Ammonia Slip (NH₃):
 (1) 5.0 ppmvd
 (2) 22.3 lb/hr without duct burner
 (3) 23.7 lb/hr with duct burner
- (j) Formaldehyde (HCHO):
 (1) 0.091 ppmvd @ 15% O₂
- (k) Carbon Dioxide (CO₂):
 (1) 1,000 lbs CO₂/MWh (gross) on a 12-month annual average basis.
 (2) 6,973 Btu/kW-hr (HHV) gross heat rate, w/out DB @ ISO conditions, new and clean
 (3) 7,368 Btu/kW-hr (HHV) gross heat rate, w/out DB @ ISO conditions, life of facility
 (4) 3,656,984 TPY total CO₂e, 12-month rolling.

ppmvd = parts per million volume on a dry gas basis, corrected to 15 percent O₂.
 ppmvd and lb/MMBtu limits based upon a 3-hour averaging time.

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

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

At all times, including startup and shutdown, emissions from each combined cycle combustion turbine, Source IDs 201 and 202, shall not exceed the following on a 12-month rolling basis:

- (a) Nitrogen Oxides (NO_x): 106.2 tpy
 (b) Carbon Monoxide (CO): 105.1 tpy
 (d) Volatile Organic Compounds (VOC): 38.5 tpy
 (e) Total Particulate Matter (PM): 58.0 tpy
 (f) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM₁₀): 58.0 tpy

**SECTION E. Source Group Restrictions.**

- (g) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM_{2.5}): 58.0 tpy
- (h) Sulfuric Acid Mist (H₂SO₄): 12.5 tpy
- (c) Sulfur Oxides (SO_x): 16.0 tpy
- (i) Ammonia (NH₃): 103.3 tpy
- (j) Lead (Pb): 0.007 tpy
- (k) Greenhouse Gases, expressed as Carbon Dioxide Equivalent (CO₂e): 1,828,492 tpy
- (l) Total HAPs: 7.6 tpy

[Authority for the PM emission limit is also derived from 25 PA Code Chapter 123.11]

Compliance with the above limits for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, GHG, and H₂SO₄ ensures compliance with the best available control technology (BACT) requirements under 25 Pa. Code, Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality).

Compliance with the above limits for NO_x and VOC ensures compliance with the lowest achievable emission rate ("LAER") requirements of 25 Pa. Code, Chapter 127, Subchapter E. (New Source Review).

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

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 10% for a period or periods aggregating more than 3 minutes in any 1 hour.
- (b) Equal to or greater than 10% for a period or periods aggregating more than 6 minutes during startup and shutdown.

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

[Authority for this emission limit is also derived from 25 PA Code Chapter 123.22]

Average fuel sulfur content shall not exceed 0.40 gr/100 scf natural gas on a monthly basis, and sulfur oxide emissions shall not exceed the rate of 4 pounds per million Btu of heat input over a 1-hour period.

Operation Hours Restriction(s).**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Startups and shutdowns:

- (a) The durations of startups and shutdowns shall be minimized to the maximum extent possible.
- (b) Total startup and shutdown duration for each combined cycle combustion turbine shall not exceed the following:

For Mid-Range Dispatch

- (i) Mid Range Cold Startups 15 hours in any consecutive 12-month period.
- (ii) Mid Range Warm Startups 50 hours in any consecutive 12-month period.
- (iii) Mid Range Hot Startups 155 hours in any consecutive 12-month period.
- (iv) Mid Range shutdowns 220 hours in any consecutive 12-month period.

For Baseload - assumes no lag between CT starts

- (i) Baseload Cold Startups 5 hours in any consecutive 12-month period.
- (ii) Baseload Warm Startups 25 hours in any consecutive 12-month period.
- (iii) Baseload Hot Startups 50 hours in any consecutive 12-month period.
- (iv) Baseload shutdowns 80 hours in any consecutive 12-month period.

**SECTION E. Source Group Restrictions.**

- (c) Each startup event shall not exceed one hour in duration.
 (d) Each shutdown shall not exceed one half hour in duration.

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

The permittee shall conduct subsequent EPA reference method stack testing for VOC, formaldehyde and PM (filterable), PM10 (filterable and condensable), PM2.5 (filterable and condensable) no less often than every two years after initial testing.

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

CO2 shall be monitored with in accordance with 40 CFR 75.

III. MONITORING REQUIREMENTS.**# 009 [25 Pa. Code §123.51]****Monitoring requirements**

- (a) This section applies to combustion units with a rated heat input of 250 million Btus per hour or greater and with an annual average capacity factor of greater than 30%.
- (b) Sources subject to this section shall install, operate and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources).
- (c) Sources subject to this section shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with Chapter 139, Subchapter C.
- (d) Continuous nitrogen oxides monitoring systems installed under the requirements of this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.
- (e) The Department may exempt a source from the requirements of subsection (b) if the Department determines that the installation of a continuous emission monitoring system would not provide accurate determination of emissions or that installation of a continuous emission monitoring system cannot be implemented by a source due to physical plant limitations or to extreme economic reasons. A source exempted from the requirements of subsection (b) shall satisfy alternative emission monitoring and reporting requirements proposed by the source and approved by the Department which provide oxides emission data that is representative of actual emissions of the source.
- (f) Sources subject to this section shall comply by October 20, 1993, unless the source becomes subject to the requirements later than October 20, 1990. For sources which become subject to the requirements after October 20, 1990, the source has 36 months from the date the source becomes subject to this section. The Department may issue orders providing a reasonable extension of time for sources that have made good faith efforts to install, operate and maintain continuous monitoring devices, but that have been unable to complete the operations within the time period provided.

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

The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide, and ammonia emissions on the exhaust of each combined-cycle powerblock in accordance with all applicable requirements specified in 25 Pa. Code §139 and the Department's Continuous Source Monitoring Manual.

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

The permittee shall continuously monitor the oxygen level in the stack effluent.

**SECTION E. Source Group Restrictions.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across the oxidation catalyst incorporated into IDs C201B and C202B as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis. Visual and audible alarms shall be utilized to indicate improper operation.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across the selective catalytic reduction catalysts incorporated into IDs C201A and C202A as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis. Visual and audible alarms shall be utilized to indicate improper operation.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pre-control and postcontrol nitrogen oxides (expressed as NO₂) emissions from Source IDs 201 and 202 shall be monitored and recorded by the feed-forward process control loop to ensure maximum control efficiency and minimum ammonia slip. Visual and audible alarms shall be utilized to indicate improper operation.

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

(a) The following continuous emission monitoring systems must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the 'Submittal and Approval', 'Record Keeping and Reporting', and 'Quality Assurance' requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

1. Continuous Emissions Monitoring System #1

(a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine

(b) Parameter to be Reported: CO

(c) Units of Measurement to be Reported: lb/hr

(d) Moisture Basis of Measurement to be Reported:

(e) Correction basis of Measurements to be Reported: none

(f) Data Substitution Required: No

(g) Emission Standards-

(1) Emission Standard Carbon Monoxide (CO): (1) 14.7 lb/hr without duct burner, (2) 15.6 lb/hr with duct burner

(a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour

(b) Emission Standard Direction: Violation if greater than emission standard value

(c) Variable Emission Standard: Yes

2. Continuous Emissions Monitoring System #2

(a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine

(b) Parameter to be Reported:NOX

(c) Units of Measurement to be Reported: lb/hr

(d) Moisture Basis of Measurement to be Reported:

(e) Correction basis of Measurements to be Reported: none

(f) Data Substitution Required: No

(g) Emission Standards-

(1) Emission Standard # 1: Nitrogen Oxides (NO_x): (1) 24.2 lb/hr without duct burner, (2) 25.7 lb/hr with duct burner

(a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour

(b) Emission Standard Direction: Violation if greater than emission standard value

(c) Variable Emission Standard: Yes

3. Continuous Emissions Monitoring System #3

**SECTION E. Source Group Restrictions.**

- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: Ammonia Slip
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
 - (1) Emission Standard (i) Ammonia Slip (NH₃): (1) 22.3 lb/hr without duct burner, (2) 23.7 lb/hr with duct burner
 - (a) Emission Standard Averaging Period Description: 3-hour rolling average, calculated once per hour
 - (b) Emission Standard Direction: Violation if greater than emission standard value
 - (c) Variable Emission Standard: Yes

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

This section applies to monitoring systems as defined in the manual referenced at 139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under section 4 of the act(35 P. S. 4004).

- (1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual," available from the Department shall be utilized to obtain Department approval. This publication includes:
 - (i) Installation requirements.
 - (ii) Performance specifications.
 - (iii) Test procedures.
 - (iv) Reporting requirements.
 - (v) Quality assurance requirements.
 - (vi) Administrative procedures for obtaining Department approval.
- (2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of persons qualified by training and experience.
- (3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.
- (4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the manual referenced in 139.102.
 - (4a). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.
- (5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the manual referenced in 139.102(3). The records shall be maintained for 5 years and be available for inspection by Department personnel.
- (6) The owner of a monitored source shall provide permanent sampling facilities as specified in 139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.
- (7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the manual referenced in 139.102(3).
- (8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 139.102.

**SECTION E. Source Group Restrictions.**

- (9) The Department's approval will be based on the criteria specified in the manual referenced in 139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.
- (10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than 1 hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within 2 hours of the malfunction.
- (11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the manual referenced in 139.102(3).
- (12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title, in a plan approval or permit condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under section 4 of the act. For purposes of calculating data availability, "process down" time, as specified in the manual referenced in 139.102(3), shall be considered valid time.
- (i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.
- (14) Monitoring systems shall comply with the applicable performance specifications section of the manual referenced in 139.102(3). The Department has the authority to determine which of the performance specifications are applicable.
- (15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.
- (16) The requirements of this section apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

IV. RECORDKEEPING REQUIREMENTS.**# 017 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

The permittee shall maintain the following comprehensive and accurate records:

- (a) Actual heat input and power output on a 12-month rolling basis.
- (b) The number of startups and shutdowns and the dates each occur.
- (c) Duration of each startup and shutdown event.
- (d) The type of each startup (i.e. cold, warm, or hot).
- (e) Duct burner hours of operation on a 12-month rolling basis.
- (f) Requirements established in 25 Pa. Code §139 Subchapter C, requirements for source monitoring for stationary sources.
- (g) Requirements in the most recent version of the Department's Continuous Source Monitoring Manual.

V. REPORTING REQUIREMENTS.**# 018 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(10) and

**SECTION E. Source Group Restrictions.**

139.101(12), 139.103, 139.108 or 139.111]]

(a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), (and) the "Record Keeping and Reporting" requirements as established in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.

(b) The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.

(c) Initial quarterly reports following system certification shall be submitted to the Department within 35 days following the date upon which the Department notifies the owner or operator, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.

(d) Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.

(e) Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.

(f) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

019 [25 Pa. Code §145.204.]**Incorporation of Federal regulations by reference.**

The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 96.21(b)(1)(ii).

020 [25 Pa. Code §145.204.]**Incorporation of Federal regulations by reference.**

The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 97.21(b)(1)(ii).

VI. WORK PRACTICE REQUIREMENTS.**# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall operate all air cleaning devices at all times once operating parameters (temperature, flow, etc.) are sufficient for proper operation.

022 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(2), 139.101(3), 139.101(4), 139.101(6), 139.101(7), 139.101(8), 139.101(12), 139.101(14) and 139.101(15)]

(a) Continuous Emission Monitoring Systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.

(b) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

(c) Data Availability Standards: Continuous emission monitoring shall meet the following minimum data availability requirements:

1. In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:

(a) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter

**SECTION E. Source Group Restrictions.**

applies, shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001; or

(b) In each calendar quarter, at least 95% of the hours shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

2. Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with the regulations.

3. Emission Standard(s) To Which Data Availability Standard applies:

(a) CO (lb/hr)

(b) NO_x (lb/hr)

(c) Ammonia Slip (lb/hr)

VII. ADDITIONAL REQUIREMENTS.

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each combined cycle combustion turbine (Source IDs 201 and 202) shall be equipped with DLN burners, selective catalytic reduction, and oxidation catalysts.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart KKKK [40 CFR § 60.4300 through § 60.4420].

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide, and ammonia emissions on the exhaust of each combined-cycle powerblock incorporated into Source IDs 201 and 202 in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual."

026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[25 Pa. Code §127.441(c) & Chapter 139; §§114(a)(3), 504(b) of the CAA] Sampling, Testing and Monitoring Procedures

1. The permittee shall perform the emissions monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 114(a)(3) (42 U.S.C.A. §§ 7414 (a)(3)) or 504(b) (42 U.S.C.A. §§ 7661c(b)) of the Clean Air Act.

2. Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, quality assurance, recordkeeping and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, Subpart C, Article III (relating to air resources), including Chapter 139 (relating to sampling and testing). The permittee shall also comply with applicable requirements related to monitoring, quality assurance, reporting and recordkeeping required by the Clean Air Act including §§ 114(a)(3) and 504(b) and regulations adopted thereunder, unless otherwise required by this permit.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 2

Group Description: Units Subject to NSPS Subpart KKKK

Sources included in this group

ID	Name
201	COMBUSTION TURBINE/DUCT BURNER UNIT 1
202	COMBUSTION TURBINE/DUCT BURNER UNIT 2
C201A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 1
C201B	OXIDATION CATALYST CT/DB UNIT 1
C202A	SELECTIVE CATALYTIC REDUCTION (SCR) CT/DB UNIT 2
C202B	OXIDATION CATALYST CT/DB UNIT 2

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for nitrogen oxides (NOX)?**

- (a) You must meet the emission limits for NO_x specified in Table 1 to this subpart [15 ppm @ 15% O₂ or 54 nanograms per joule (ng/J) of useful output (0.43 lb/MWh)].
- (b) If you have two or more turbines that are connected to a single generator, each turbine must meet the emission limits for NO_x.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4330]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for sulfur dioxide (SO₂)?**

- (a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.
- (1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output;
- (2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; or
- (3) N/A
- (b) N/A

II. TESTING REQUIREMENTS.**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4340]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I demonstrate continuous compliance for NOX if I do not use water or steam injection?**

- (a) If you are not using water or steam injection to control NO_x emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, you must resume annual performance tests.
- (b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
- (1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345, or
- (2) N/A

**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?**

(a) Each NOX diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NOX diluent CEMS that is installed and certified according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

(b) As specified in §60.13(e)(2), during each full unit operating hour, both the NOX monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NOX emission rate for the hour.

(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.

(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75 of this chapter.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4350]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I use data from the continuous emission monitoring equipment to identify excess emissions?**

(a) All CEMS data must be reduced to hourly averages as specified in §60.13(h).

(b) For each unit operating hour in which a valid hourly average, as described in §60.4345(b), is obtained for both NOX and diluent monitors, the data acquisition and handling system must calculate and record the hourly NOX emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of this part. For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2 (or the hourly average CO2 concentration is less than 1.0 percent CO2), a diluent cap value of 19.0 percent O2 or 1.0 percent CO2 (as applicable) may be used in the emission calculations.

(c) Correction of measured NOX concentrations to 15 percent O2 is not allowed.

(d) If you have installed and certified a NOX diluent CEMS to meet the requirements of part 75 of this chapter, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under §60.7(c).

(e) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.

(f) Calculate the hourly average NOX emission rates, in units of the emission standards under §60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:

(1) N/A [Not simple-cycle]

(2) For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1 of this subpart, except that the gross energy output is calculated as the sum of the total electrical and mechanical energy

**SECTION E. Source Group Restrictions.**

generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW.

(3) N/A

(g) N/A

(h) For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 30 unit operating day rolling average basis, as described in §60.4380(b)(1).

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4360]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I determine the total sulfur content of the turbine's combustion fuel?

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

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.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What reports must I submit?

(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4333]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What are my general requirements for complying with this subpart?

77. §60.4333 What are my general requirements for complying with this subpart?

(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:

**SECTION E. Source Group Restrictions.**

- (1) Determine compliance with the applicable NOX emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or
- (2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for units located in continental areas and 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

- (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for noncontinental areas; or
- (b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for continental areas or 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

*** Permit Shield in Effect. ***

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 3

Group Description: Units Subject to NSPS Subpart IIII

Sources included in this group

ID	Name
300	EMERGENCY GENERATOR (1000KW)
301	FIRE ENGINE PUMP (510 BHP)

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufa**

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) N/A

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) N/A

(c) [Reserved]

(d) N/A

(e) N/A

(f) N/A

(g) N/A

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal cor**

(a) N/A

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

**SECTION E. Source Group Restrictions.**

(d) N/A

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) N/A

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?**

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

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**

(a) N/A

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) N/A

(e) N/A

II. TESTING REQUIREMENTS.**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4212]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the equation in §60.4212(c).

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40

**SECTION E. Source Group Restrictions.**

CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) N/A

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

III. MONITORING REQUIREMENTS.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) N/A

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.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) N/A

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) N/A

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

**SECTION E. Source Group Restrictions.**

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vi) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

VI. WORK PRACTICE REQUIREMENTS.**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

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

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) N/A

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) N/A

(e) N/A

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

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

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

**SECTION E. Source Group Restrictions.**

- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- (ii) [Reserved]
- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
- (1) N/A
- (2) N/A
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every

**SECTION E. Source Group Restrictions.**

8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

VII. ADDITIONAL REQUIREMENTS.**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****Am I subject to this subpart?**

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) N/A

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(b) N/A

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) N/A

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4208]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What is the deadline for importing or installing stationary CI ICE produced in the previous model year?**

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) N/A

(c) N/A

(d) N/A

(e) N/A

(f) N/A

(g) N/A

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

**SECTION E. Source Group Restrictions.**

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 4

Group Description: Storage Tanks

Sources included in this group

ID	Name
401	LUBRICATION OIL TANK #1 (16000 GAL)
402	LUBRICATION OIL TANK #2 (16000 GAL)
403	DIESEL STORAGE TANK (1600 GAL)
404	DIESEL FIRE PUMP DAY STORAGE TANK (300 GAL)
405	AQUEOUS AMMONIA STORAGE TANK (20000 GAL)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall keep a record of the vapor pressure of the contents of each storage tank unless the respective tank is equipped with pressure relief valves that meets the requirement in this permit relating to pressure release settings.

(b) The information used to demonstrate compliance with this permit condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Compliance with this streamlined permit condition assures compliance with the provisions of 25 Pa. Code § 129.57]

The permittee shall not store any liquid containing volatile organic compounds (VOC) with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in each storage tank unless each of the tanks are equipped with pressure relief valve which is maintained in good operating condition and which are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum, or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

VII. ADDITIONAL REQUIREMENTS.

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

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

- (a) The Department received the operating permit application for this facility on 6/3/2019.
- (b) This permit is the Initial Title V Operating Permit No. 40-00129.
- (c) Plan Approvals include:
 - 40-00129A issued 9/1/2015
 - 40-00129B issued 5/2/2016
- (d) Requests for Determination (RfDs) include:
 - 40-0997 approved 7/25/2017



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