



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

TITLE V/STATE OPERATING PERMIT

Issue Date: December 31, 2020

Effective Date: January 1, 2021

Expiration Date: December 31, 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: 06-05154

Federal Tax Id - Plant Code: 37-1779677-1

Owner Information

Name: BIRDSBORO POWER LLC
Mailing Address: 1 ARMORCAST RD
BIRDSBORO, PA 19508

Plant Information

Plant: BIRDSBORO POWER LLC/BIRDSBORO POWER PROJECT
Location: 06 Berks County 06802 Birdsboro Borough
SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: JAMES RYAN
Title: PROJECTS GEN MGR
Phone: (518) 428 - 5929

Permit Contact Person

Name: FRANK SKOMORUCHA
Title: EHS MGR
Phone: (484) 273 - 0718

[Signature] _____
WILLIAM R. WEAVER, SOUTHCENTRAL REGION AIR PROGRAM MANAGER



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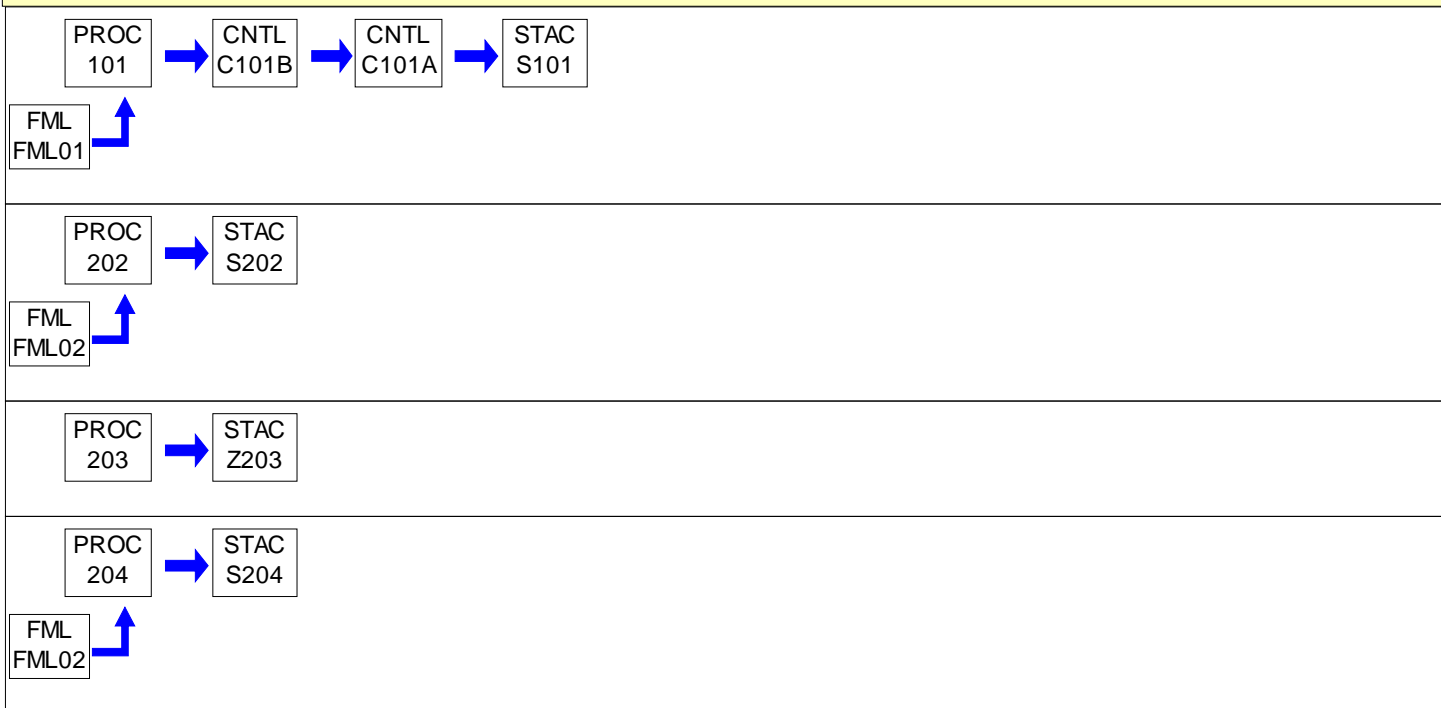
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	COMBINED CYCLE UNIT	3.000 MCF/HR	Natural Gas
202	EMERGENCY CI FIRE PUMP (450HP)	26.200 Gal/HR	Diesel Fuel
203	COOLING TOWER	6,927.000 Th Gal/HR	COOLING WATER
204	EMERGENCY CI GENERATOR (2000KW)	161.000 Gal/HR	Diesel Fuel
C101A	SCR		
C101B	OXIDATION CATALYST		
FML01	NATURAL GAS PIPELINE		
FML02	DIESEL FUEL (ULTRA LOW SULFUR)		
S101	STACK - COMBINED CYCLE UNIT		
S202	STACK - EMERGENCY FIRE PUMP		
S204	STACK - 2000KW EMERGENCY GENERATOR		
Z203	FUGITIVE EMISSIONS		

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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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

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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).

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(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.

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(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,

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

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

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

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

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

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

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

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

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

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

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

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

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

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calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

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

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

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

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

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

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

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

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

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

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

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

**SECTION B. General Title V Requirements**

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

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

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

**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 Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

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

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

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

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

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

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

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

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

#031 [25 Pa. Code §135.3]**Reporting**

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

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

#032 [25 Pa. Code §135.4]**Report Format**

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) The permittee may not allow the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving, and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars, and other vehicular equipment are not considered as emissions from the use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning of materials.

(7) Sources and classes of sources other than those identified in (a)(1)-(a)(6), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

- (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.

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

The permittee may not allow the emission of fugitive particulate matter into the outdoor atmosphere from a source specified in Section C, Condition #001, if the emissions are visible at the point the emissions pass outside the permittees property.

003 [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.

004 [25 Pa. Code §123.41]**Limitations**

The permittee may 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:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one hour.
- (2) Equal to or greater than 60% at any time.

005 [25 Pa. Code §123.42]**Exceptions**

The emission limitation of 25 Pa. Code Section 123.41, shall not apply when:

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) The emission results from sources specified in Section C, Condition #001, subsections (a)(1)-(a)(7).

**SECTION C. Site Level Requirements****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit emissions from the facility to less than the following during any consecutive 12-month period:

- a. PM-10 - 100 tons
- b. PM-2.5 - 100 tons
- c. Sulfur Dioxide - 100 tons
- d. Nitrogen Oxides - 100 tons
- e. Carbon Monoxide - 100 tons
- f. Volatile Organic Compounds (VOC) - 50 tons
- g. Hazardous Air Pollutants (HAP)
 1. 10 tons of any individual
 2. 25 tons total of all

007 [25 Pa. Code §129.14]**Open burning operations**

(a) The permittee may not allow open burning of materials in such a manner that:

- (1) The emissions are visible, at any time, at the point such emissions pass outside the permittee's property.
- (2) Malodorous air contaminants from the open burning are detectable outside the permittee's property.
- (3) The emissions interfere with the reasonable enjoyment of life and property.
- (4) The emissions cause damage to vegetation or property.
- (5) The emissions are or may be deleterious to human or animal health.

(b) Exceptions. The requirements of Subsection (a) do not apply where the open burning operations result from:

- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public official.
- (2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set solely for recreational or ceremonial purposes.
- (5) A fire set solely for cooking food.

(c) This permit does not constitute authorization to burn solid waste pursuant to section 610 (3) of the Solid Waste Management Act. 35 PS Section 6018.610 (3) or any other provision of the Solid Waste Management Act.

II. TESTING REQUIREMENTS.**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Department reserves the right to require exhaust stack testing of the sources & control devices referenced in this permit to measure emissions for purposes including verification of permit condition compliance and estimation of annual air emissions.

009 [25 Pa. Code §139.1]**Sampling facilities.**

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

**SECTION C. Site Level Requirements****# 010 [25 Pa. Code §139.3]****General requirements.**

(a) Unless otherwise approved in writing by DEP, the permittee shall do the following:

(1) Conduct performance testing of the turbine in accordance with the provisions of 25 Pa Code Section 139 and the Department's Source Testing Manual and any applicable federal regulations.

(2) Submit to DEP a test protocol for review and approval no later than 365 days before the expiration of this permit, and not conduct the test that is the subject of the protocol until the protocol has been approved by DEP.

(3) If DEP finds deficiencies in the protocol, the permittee shall provide a response to DEP addressing the deficiencies within 30 days of being notified of the deficiencies.

(4) Complete the performance test within 90 days of DEP's approval of the test protocol.

(b) Pursuant to 25 Pa. Code § 139.3 at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 25 Pa. Code Section 139.53(a)(3) within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

(d) Pursuant to 40 CFR Part 60.8(a), 40 CFR Part 61.13(f) and 40 CFR Part 63.7(g) a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program. For those tests being conducted pursuant to 40 CFR Part 61, a complete test report shall be submitted within 31 days after completion of the test

(e) 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.

(f) Pursuant to 25 Pa. Code § 139.3 to all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(h) 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/ecommm/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, submittal shall be made as follows:

Regional Office:

Digital copy (only): RA-epscstacktesting@pa.gov

Bureau of Air Quality:

**SECTION C. Site Level Requirements**

Paper copy: PA DEP, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468
 Digital copy: RA-epstacktesting@pa.gov

(i) 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.

III. MONITORING REQUIREMENTS.**# 011 [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 device(s) approved by the Department.

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

The permittee shall conduct a weekly inspection around the facility periphery during daylight hours when the sources are in operation, to detect visible emissions, fugitive emissions, and malodorous air contaminants. Weekly inspections are necessary to determine:

- (a) The presence of visible emissions. Visible emissions may be measured according to the methods specified in Section C, Condition #011. Alternately, personnel who observe visible emissions may report the incident to the Department within two (2) hours of the incident and make arrangements for a certified observer to measure the visible emissions.
- (b) The presence of fugitive emissions beyond the property boundaries, as stated in Section C, Condition #002.
- (c) The presence of odorous air contaminants beyond the property boundaries, as stated in Section C, Condition #003.

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

The permittee shall perform monthly calculations for all the air contaminants listed in Section C, Condition 006 to demonstrate compliance with the 12-month rolling totals.

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

The permittee shall maintain records of weekly inspections referenced in Section C, Condition #012. The records shall include, at minimum, the following information:

- (1) The name of the company representative monitoring these instances.
- (2) A description of the visible emissions, fugitive emissions and/or malodors observed and actions taken to mitigate them. If none, record "None."
- (3) The date and time of the observation.
- (4) The wind direction during each observation.

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

All records required by this operating permit and subsequent issuances shall be maintained for the most recent five-year period and made available to the Department upon request.

**SECTION C. Site Level Requirements****# 016 [25 Pa. Code §135.5]****Recordkeeping**

The permittee shall maintain and make available upon request by the Department, records including computerized records that may be necessary to comply with 25 Pa. Code Sections 135.3, and 135.21 (relating to reporting, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions). If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

V. REPORTING REQUIREMENTS.**# 017 [25 Pa. Code §127.442]****Reporting requirements.**

The permittee shall report malfunctions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. Malfunctions shall be reported as follows:

(a) Any malfunction which poses an imminent danger to the public health, safety, welfare, and environment, shall be immediately reported to the Department by telephone. The telephone report of such malfunctions shall occur no later than two (2) hours after the incident. The permittee shall submit a written report of instances of such malfunctions to the Department within three (3) days of the telephone report.

(b) Unless otherwise required by this permit, any other malfunction that is not subject to the reporting requirement of subsection (a) above, shall be reported to the Department, in writing, within five (5) days of malfunction discovery.

(c) Telephone reports can be made to the Reading District Office at (610) 916-0100 during normal business hours or to the Department's Emergency Hotline at any time. The Emergency Hotline phone number is changed/updated periodically. The current Emergency Hotline phone number can be found at <https://www.dep.pa.gov/About/Regional/SouthcentralRegion/Pages/default.aspx>.

018 [25 Pa. Code §135.3]**Reporting**

The permittee shall submit an annual Air Information Management System (AIMS) report to the Department. The AIMS report for a given calendar year is due no later than March 1 of the following year, and shall be submitted to the Reading District Supervisor unless otherwise specified. Also, reference Conditions B031 and B032.

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

VI. WORK PRACTICE REQUIREMENTS.**# 019 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne from any source specified in Section C, Condition #001(a)(1)-(a)(7). These actions shall include, but are not limited to the following:

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

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

(3) Paving and maintenance of roadways.

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

**SECTION C. Site Level Requirements****# 020 [25 Pa. Code §127.444]****Compliance requirements.**

The permittee shall operate and maintain all sources and any air cleaning devices identified in this operating permit in accordance with the manufacturer's recommendations/specifications, as well as in a manner consistent with good operating practices.

VII. ADDITIONAL REQUIREMENTS.**# 021 [25 Pa. Code §127.703]****Operating permit fees under Subchapter F.**

The facility is not subject to the Title V emission fee payment requirements found in B 018(b). For purposes of annual fee payment, the facility shall comply with the fee requirements for facilities identified in subparagraph (iv) of the definition of a Title V facility in 25 Pa. Code Section 121.1. These requirements are currently found at 25 Pa. Code Section 127.704(c)(2).

022 [25 Pa. Code §135.21]**Emission statements**

Per Site Level Category VIII COMPLIANCE CERTIFICATION below, forward EPA the annual compliance certification report electronically, in lieu of a hard copy version, to the email address: 'R3_APD_Permits@epa.gov'.

VIII. COMPLIANCE CERTIFICATION.

The permittee shall submit within thirty days of 01/01/2022 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit, and annually thereafter.

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

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

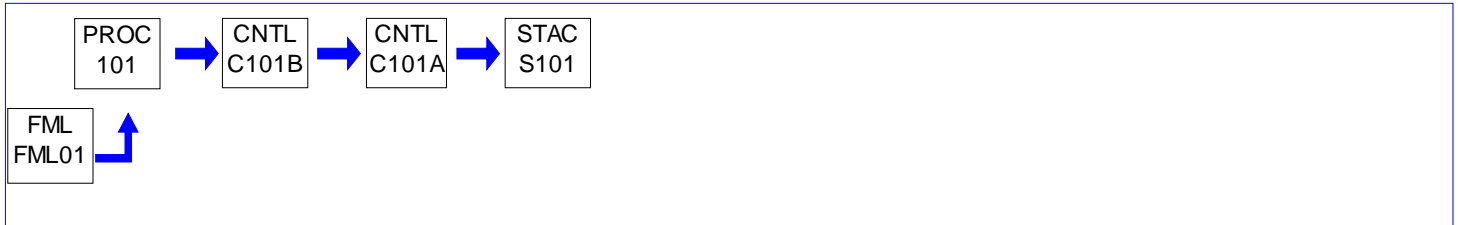
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: COMBINED CYCLE UNIT

Source Capacity/Throughput: 3.000 MMCF/HR Natural Gas

Conditions for this source occur in the following groups: 001
002
003
004

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.1]****Purpose.**

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the emission of ammonia from the combustion turbine to 5.0 ppmvd (corrected to 15% oxygen; average of 3 test runs).

002 [25 Pa. Code §127.1]**Purpose.**

(a) Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the SO_x (expressed as SO₂) emissions from the combustion turbine to 0.0015 lb/mmBTU.

(b) Compliance with this condition shall be demonstrated by the combustion of natural gas as noted in Condition #007, below.

[Compliance with the SO_x requirements specified in this condition assures compliance with 25 Pa. Code §123.21(b) and 40 CFR §60.4330(a)(2)]

003 [25 Pa. Code §127.1]**Purpose.**

The permittee shall limit the emissions from the combustion turbine to the following:

(a) NO_x (expressed in terms of NO₂) 2.0 ppmvd @ 15% O₂ (3-hour block average)

(b) CO 2.0 ppmvd @ 15% O₂ (3-hour block average)

(c) VOC (expressed in terms of propane (C₃H₈)) 0.33 ppmvd @ 15% O₂ (3-hour block average; average of 3 test runs)

(d) PM/PM₁₀/PM_{2.5} 12.0 lb/hr (average of 3 test runs)

(e) H₂SO₄ Mist 0.000853 lb/mmBTU [average of 3 test runs]

(f) Formaldehyde 1.35 lb/hr [average of 3 test runs]

(g) The emission limits above, do not apply during periods of startup and shutdown (S/S). S/S events are defined in Condition #009, below.

[Compliance with the NO_x requirements specified in part (a) of this condition assures compliance with 40 CFR §60.4320(a)]

**SECTION D. Source Level Requirements****# 004 [25 Pa. Code §127.1]****Purpose.**

The permittee shall limit the Carbon Dioxide (CO₂) emissions from the combustion turbine to 1,000 lbs CO₂/MWh (gross) on a 12-month annual average basis.

005 [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 from the combustion turbine 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 three (3) minutes in any one hour.
- (b) Equal to or greater than 30% at any time.

006 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall limit the combustion turbines' annual emissions to less than or equal to the following thresholds during any consecutive 12-month period:

- (a) 96.3 tons per year (TPY) of NO_x.
- (b) 69.4 TPY of carbon monoxide (CO).
- (c) 23.7 TPY of volatile organic compounds (VOC).
- (d) 17.5 TPY of sulfur dioxide (SO₂).
- (e) 54.2 TPY of particulate matter (PM).
- (f) 54.2 TPY of PM-10 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 10 micron body).
- (g) 54.2 TPY of PM-2.5 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 2.5 micron body).
- (h) 10.7 TPY of sulfuric acid mist (H₂SO₄).
- (i) 5.75 TPY of formaldehyde
- (j) 9.86 TPY of total hazardous air pollutants (HAPs)

Fuel Restriction(s).**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall operate the combustion turbine using only natural gas fuel.
- (b) The sulfur content of the natural gas fuel fired by the combustion turbine shall not exceed 0.5 grain per 100 standard cubic feet.

Operation Hours Restriction(s).**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The cumulative operating hours of the combustion turbine shall not exceed 8,400 hours during any consecutive 12-month period.

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

- (a) Startup is defined as the period beginning with ignition in the combustion turbine and lasting until either:
 1. The combustion process, air pollution control equipment, and associated control systems have attained steady state compliance with emission limits, or
 2. 105 minutes after ignition, whichever occurs first.

**SECTION D. Source Level Requirements**

(b) Shutdown is defined as the period beginning when a stop command is issued or when the unit experiences a runback, and the Steam Turbine Generator (STG) clutch dis-engages. Shutdown ends when the fuel flow ceases. Shutdowns shall not exceed 25.5 minutes in duration.

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

(a) The testing required in Section C Condition 010 for the combustion turbine shall be for VOC, PM, PM10, PM2.5, H2SO4 Mist, Formaldehyde and Ammonia Slip. The VOC emissions test will also be used to verify the CO/VOC emissions correlation factor. Reference Condition 012. The testing is intended for use in determining compliance with Conditions #001, #003 and #006, above.

(1) EPA Reference Method 18, 25 or another Method(s) approved by the Department - VOC emissions; report VOC emissions in units of ppmvd (corrected to 15% oxygen on a dry basis), lb/mmBTU, and lb/hr; VOC emissions shall be reported in terms of propane (C3H8).

(2) EPA Reference Methods 5 and 202, or another Method(s) approved by the Department - PM emissions (filterable and condensable shall be reported separately and together); report PM emissions in units of lb/hr and lb/mmBTU.

(3) EPA Reference Methods 201 or 201A, and 202, or another Method(s) approved by the Department - PM10 emissions (filterable and condensable shall be reported separately and together); report PM10 emissions in units of lb/hr and lb/mmBTU.

(4) EPA Reference Methods 201A and 202, or another Method(s) approved by the Department - PM2.5 emissions (filterable and condensable shall be reported separately and together); report PM2.5 emissions in units of lb/hr and lb/mmBTU.

(5) EPA Reference Method 8 or another Method(s) approved by the Department - H2SO4 mist emissions; report H2SO4 mist emissions in units of lb/mmBTU and lb/hr.

(6) EPA Reference Conditional Test Method CTM-027 or another Method(s) approved by the Department - ammonia slip emissions; report ammonia slip emissions in units of ppmvd (corrected to 15% oxygen on a dry basis).

(7) EPA Reference Method 323 or another Method(s) approved by the Department - formaldehyde emissions; report formaldehyde emissions in units of lb/mmBTU and lb/hr.

(b) The emission tests referenced in part (a), above, shall be performed while the combustion turbine is operating at its maximum capacity or as close to its maximum capacity as it will operate (minimum combustion turbine operating load of 90% required).

(c) If the results of an emissions test performed as required by this permit exceed the limit specified in any condition of this permit, the permittee shall take appropriate corrective actions. Within 30 days of receipt of any noncompliant stack test results, the permittee shall submit a written description of its corrective actions to the Department. The permittee shall take appropriate action to minimize emissions from the affected combustion turbine while the corrective actions are being implemented. The Department shall notify the permittee within 30 days if the corrective actions taken are deemed deficient. Within 30 days of receipt of the notice of deficiency from the Department, the permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement action to resolve noncompliant emissions testing issues.

(d) If the results of a required emissions test exceed any limit defined in this permit, or if an emissions test was not performed in accordance with the emissions test protocol, or the combustion turbine and/or air cleaning device was not operated in accordance with the permit, then another emissions test shall be performed to determine compliance. In these instances, the permittee shall perform a retest within 120 days of the permittee's receipt of the original stack test results. The Department may extend the retesting deadline, in writing, if the permittee demonstrates to the Department's satisfaction that retesting within 120 days is not practicable. Failure of the second emissions test to demonstrate compliance with the

**SECTION D. Source Level Requirements**

limit in the permit, or not performing the emissions test in accordance with the emissions test protocol, or not operating the combustion turbine and/or associated air cleaning device(s) in accordance with the permit may be grounds for immediate revocation of the permit to operate the combustion turbine.

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

(a) The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for the combustion turbine's SCR unit:

- (1) Catalyst bed inlet gas temperature.
- (2) Pressure differential across the catalyst bed.
- (3) Ammonia solution injection rate.

(b) The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for the combustion turbine's oxidation catalyst:

- (1) Catalyst bed inlet gas temperature.
- (2) Pressure differential across the catalyst bed.

(c) The aforementioned SCR unit and oxidation catalyst monitoring instrumentation shall be calibrated, at a minimum, annually.

(d) The permittee shall retain records to demonstrate compliance with part (c), above, for a minimum of five (5) years and shall make them available to the Department upon its request.

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

In order to ensure continuous compliance with the VOC emission limits of Condition #003(c), above, the permittee shall use CO CEMS data as a surrogate for VOC emissions by using the developed correlation factor between CO and VOC emissions during the emissions test by simultaneously operating the Department-certified CO CEMS during the VOC emissions test. The correlated VOC concentration (ppmvd) will be used to calculate VOC emissions in terms of the emission limits (i.e., ppmvd @ 15% O₂ and lb/hr). The molecular weight of propane (i.e., 44.1 lb/lb-mole) will be used to express the correlated VOC concentration and emission rate in terms of mass emissions. If the correlated VOC concentration or emission rate is in excess of the emission limit, an emission test program will be conducted to determine compliance with the VOC emission limits and to reestablish the correlation factor as necessary. The CO/VOC emissions correlation factor developed during emissions testing will be used in conjunction with the Department-certified CO CEMS to demonstrate compliance with the aforementioned VOC emission limits. Unless otherwise approved in writing by DEP, subsequent VOC emissions testing per Section D Condition 010 will be conducted, or more frequently at the Department's request, in order to verify the CO/VOC emissions correlation factor. The Department may approve an alternative methodology, in writing, for use as an indicator of compliance with the VOC emissions limit.

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

(a) The permittee shall maintain records of the natural gas fuel sulfur content in order to demonstrate compliance with Condition #007(b), above.

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

**SECTION D. Source Level Requirements****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall calculate the monthly air emissions from the combustion turbine using AP-42 emission factors, manufacturer-supplied emission factors, material balance, performance (emissions) test data, CEMS data, or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the combustion turbine air emissions for each consecutive 12-month period. The permittee shall maintain records of the combustion turbine air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #006, above.

(c) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

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

(a) The permittee shall maintain detailed records of all maintenance (preventive or otherwise) performed on the combustion turbine and its SCR unit and oxidation catalyst. The records shall include, at a minimum, the following information:

(1) The name of the company representative performing the maintenance.

(2) The date of each maintenance.

(3) A description of the maintenance, mechanical repairs, and/or adjustments.

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

(c) The permittee shall maintain a copy of the combustion turbine/SCR unit/oxidation catalyst manufacturer's preventive maintenance schedule on-site at all times.

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

(a) The permittee shall maintain records of the combustion turbine's monthly natural gas fuel combustion.

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

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

(a) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period.

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

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

The permittee shall maintain a copy of the combustion turbine/SCR unit/oxidation catalyst manufacturer's recommendations/specifications on-site at all times.

019 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall maintain records of each malfunction of the combustion turbine and its SCR unit and oxidation catalyst. A malfunction is any sudden, infrequent and not reasonably preventable failure of air pollution control or monitoring equipment, process equipment, or a process to operate in a normal or usual manner that may result in an increase in air emissions. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. The records

**SECTION D. Source Level Requirements**

shall include, at a minimum, the following information:

- (1) The date of each malfunction.
 - (2) The time and duration of the malfunction.
 - (3) The cause of the malfunction.
 - (4) The corrective action taken to abate the malfunction.
- (b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

020 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall record the duration (hours) of each combustion turbine startup and shutdown event, including the date and times of each event. Air emissions of the non-monitored pollutants listed in Conditions #001, #002 and #003, above, during these events shall be calculated based upon the emission rates presented in the plan approval application (re: P.A. No. 06-05154A). The emissions of CO and NOx during these events will be determined by each pollutant's respective Continuous Emissions Monitoring System (CEMS). All of these emissions shall be included in the monthly and consecutive 12-month air emissions calculations specified in Condition #014, above, as well as the annual report addressed in Section C, Condition #018.

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period during startup events.
- (b) The permittee shall maintain records of the combustion turbine's monthly operating hours and the operating hours for each consecutive 12-month period during shutdown events.
- (c) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its 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) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.**# 022 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall at all times operate and maintain the combustion turbine and its SCR unit and oxidation catalyst, including all associated monitoring equipment, in accordance with the manufacturer's recommendations/specifications (including the manufacturer's preventive maintenance schedule), as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.
- (b) The permittee shall operate the combustion turbine's SCR unit and oxidation catalyst at all times the turbine is in operation once the relevant operating parameters (e.g., catalyst bed inlet gas temperature, air flow) are sufficient for proper control device operation pursuant to the manufacturer's recommendations/specifications.
- (c) The permittee shall commence, and subsequently maintain, the ammonia flow for the combustion turbine's SCR unit as soon as the SCR unit's catalyst bed inlet gas temperature reaches the minimum operating temperature as recommended by the SCR unit manufacturer. The combustion turbine's SCR unit shall be designed so it will not inject ammonia into the system when the catalyst bed inlet gas temperature is less than the minimum catalyst bed inlet gas temperature as

**SECTION D. Source Level Requirements**

recommended by the SCR unit manufacturer.

VII. ADDITIONAL REQUIREMENTS.**# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The combustion turbine is subject to the following federal regulations:

- (1) Standards of Performance for Stationary Combustion Turbines (40 CFR Part 60, Subpart KKKK)
- (2) Acid Rain Program (40 CFR Parts 72-78)
- (3) Cross-State Air Pollution Rule (CSAPR) (40 CFR Part 97)
- (4) Risk Management Plan (40 CFR Part 68, Subpart G) - Applicable if greater than 10,000 lbs of anhydrous ammonia is stored at the facility.

(b) Copies of all requests, reports, applications, submittals, and other communications required to be forwarded to the U.S. Environmental Protection Agency (U.S. EPA) and/or the Department shall be forwarded to the addresses listed below unless otherwise noted.

The U.S. EPA copies shall be forwarded to:

Director
Air Protection Division
U.S. EPA, Region III (3AP00)
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiveaver@pa.gov, unless otherwise directed in writing by DEP.

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

The combustion turbine is subject to the Acid Rain Program of the Clean Air Act Amendments of 1990 and shall comply with all applicable provisions of that Title, to include the following:

- 40 CFR Part 72 Permits Regulation
- 40 CFR Part 73 Sulfur Dioxide Allowance System
- 40 CFR Part 75 Continuous Emission Monitoring
- 40 CFR Part 77 Excess Emissions

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

The Department reserves the right to use the CEMS data, emissions test results, and the operating parameters recorded during emissions testing of the combustion turbine and its SCR and oxidation catalyst to verify emission rates, to establish emission factors, and to develop compliance assurance measures in this permit.

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

**SECTION D. Source Level Requirements**

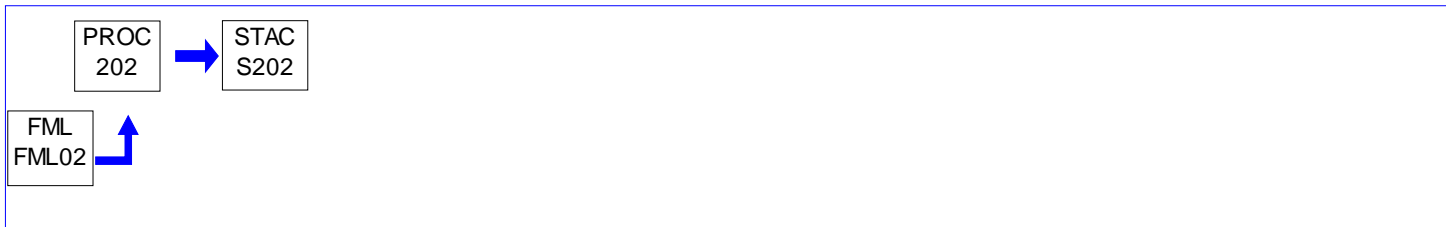
Source ID: 202

Source Name: EMERGENCY CI FIRE PUMP (450HP)

Source Capacity/Throughput:

26.200 Gal/HR

Diesel Fuel

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The emissions shall not exceed the following:

1. PMPM10/PM2.5: 0.11 lb/hr or 0.006 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.13]
2. NOx: 2.22 lb/hr or 0.11 tpy based on a 12-month rolling total
3. CO: 1.48 lb/hr or 0.074 tpy based on a 12-month rolling total
4. VOC: 0.74 lb/hr or 0.04 tpy based on a 12-month rolling total
5. SOx: 0.00546 lb/hr or 0.0003 tpy based on a 12-month rolling total [Compliance with this requirement will show compliance with 25 PA Code 123.21]

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency firewater pump shall fire only ultralow sulfur diesel fuel. The sulfur content of the diesel fuel shall not exceed 0.0015% by weight.

Operation Hours Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency fire pump operating hours shall not exceed 100 hours of non-emergency operation in any consecutive 12-month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the fuel certification reports for each delivery of diesel 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).

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.**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****Am I subject to this subpart?**

§ 60.4200 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) [NA – NOT AN ENGINE MANUFACTURER]

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

(i) [NA – ENGINE(S) IS/ARE FIRE PUMP ENGINE(S)]

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

(3) [NA – ENGINE(S) NOT MODIFIED/RECONSTRUCTED]

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) [NA – TEST CELL NOT INVOLVED]

(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) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) [NA – NOT TEMPORARY REPLACEMENT UNIT]

**SECTION D. Source Level Requirements**

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(ii) [NA – ENGINE(S) IS/ARE EMERGENCY]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) [NA - ENGINE(S) 2007 MODEL YEAR OR LATER]

(b) [NA – ENGINE(S) IS/ARE FIRE PUMP ENGINE(S)]

(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.

TABLE 4 REQUIREMENTS

Maximum Engine Power: $225 \leq KW < 450$ ($300 \leq HP < 600$)

Model Year: 2009+

Standards expressed as g/kW-hr (g/hp-hr)

NMHC + NOX: 4.0 (3.0)

CO: 3.5 (2.6)

PM: 0.2 (0.15)

END OF TABLE 4 REQUIREMENTS

(d) [NA – ENGINE(S) < 30 L/CYL]

(e) [NA - DOES NOT CONDUCT PERFORMANCE TESTS IN USE]

(f) [NA - NOT MODIFIED/RECONSTRUCTED]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 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.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(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

**SECTION D. Source Level Requirements**

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) [NA – ENGINE(S) < 30 L/CYL]

(e) [NA – NO NATIONAL SECURITY EXEMPTION]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years? [NA – ENGINE(S) IS/ARE EMERGENCY FIRE PUMP ENGINE(S)]

§ 60.4209 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) [NA – NOT SUBJECT TO 60.4204]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4211 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) [NA – YEAR/HP COMBINATION OF ENGINE(S) IS/ARE SUBJECT TO TABLE 3]

(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) [NA – ENGINE(S) NOT SUBJECT TO § 60.4204(c) or § 60.4205(d)]

**SECTION D. Source Level Requirements**

(e) [NA - NOT MODIFIED/RECONSTRUCTED]

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

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

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

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

(ii) [VACATED PER COURT ORDER AS OF 5/2/16]

(iii) [VACATED PER COURT ORDER AS OF 5/2/16]

(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) [NA – NOT USED TO SUPPLY POWER AS PART OF A FINANCIAL ARRANGEMENT]

(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) [NA – ENGINE(S) >100 HP]

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) [NA – ENGINE(S) <=500 HP]

(h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECs for qualified emergency situations as allowed by 40 CFR 1039.665.

**SECTION D. Source Level Requirements**

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

Testing Requirements for Owners and Operators

§ 60.4212 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?

[NA – TESTING NOT REQUIRED FOR CERTIFIED UNITS WHICH ARE NOT ALTERED PER 60.4211(g)]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 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 greater than or equal to 30 liters per cylinder?

[NA – DISPLACEMENT <30 L/CYL]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) [NA – UNIT(S) IS/ARE EMERGENCY]

(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) [NA – NO DIESEL PARTICULATE FILTER]

(d) [NA – NOT OPERATED FOR DEMAND RESPONSE OR VOLTAGE DEVIATION OR TO SUPPLY POWER AS PART OF A FINANCIAL ARRANGEMENT]

(e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

General Provisions

§ 60.4218 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.

Reporting Addresses & Regulatory Changes

Sources that are subject to 40 CFR Part 60 Subpart IIII shall comply with all applicable requirements of the Subpart. 40 CFR 60.8 requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director

**SECTION D. Source Level Requirements**

Air Protection Division (3AP00)
 U.S. EPA Region III
 1650 Arch Street
 Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiweaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Condition is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

§63.6590 What parts of my plant does this subpart cover?

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

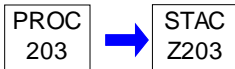
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 203

Source Name: COOLING TOWER

Source Capacity/Throughput: 6,927.000 Th Gal/HR COOLING WATER

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.1]****Purpose.**

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the emissions from the Source ID 203 cooling tower to the following:

- (a) PM = 0.6 lb/hr; 2.53 tons during any consecutive 12-month period
- (b) PM10 = 0.6 lb/hr; 2.53 tons during any consecutive 12-month period
- (c) PM2.5 = 0.6 lb/hr; 2.53 tons during any consecutive 12-month period
- (d) Blowdown water drift droplet rate limit = 0.0005%
- (e) Blowdown water total dissolved solids (TDS) limit = 2000 ppmw (monthly average TDS content during any consecutive 12-month period)

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall calculate the monthly air emissions from the Source ID 203 cooling tower. The permittee shall maintain records of the monthly air emissions.
- (b) The permittee shall calculate the cumulative Source ID 203 cooling tower air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 203 cooling tower air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #001(a),(b) & (c), above.
- (c) The permittee shall retain these records for a minimum of five (5) years. The records shall be made available to the Department upon its request.

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

- (a) The permittee shall maintain the following records regarding the Source ID 203 cooling tower:

**SECTION D. Source Level Requirements**

- (1) Monthly water circulation flow rate;
 - (2) Monthly hours of operation;
 - (3) Manufacturer's guarantee (or equivalent, as approved by the Department) of the blowdown water drift droplet rate in order to demonstrate compliance with Condition #002(d), above;
 - (4) All maintenance performed on Source ID 203 cooling tower.
- (b) The permittee shall retain these records for a minimum of five (5) years. The records shall be made available to the Department upon its request.

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

If the permittee chooses to test conductivity to determine TDS, the permittee shall develop a conductivity versus TDS ratio and submit this information to the Department for written approval. After receiving approval,

- (a) The permittee shall measure and record the conductivity of the cooling tower water daily.
- (b) The permittee shall measure the TDS of the cooling tower water semiannually to validate the correlation with the conductivity test.
- (c) The permittee shall record the data required to calculate the cooling tower TDS content. The permittee shall determine the monthly TDS content of the cooling tower blowdown water discharge, as well as the monthly average TDS content of the samples for each consecutive 12-month period. The permittee shall maintain records of the monthly TDS content and the monthly average TDS content of the samples for each consecutive 12-month period in order to demonstrate compliance with Condition #001(e), above.
- (d) The permittee shall maintain these records for a minimum of five (5) years and shall make these records available to the Department upon its request.
- (e) If this alternate method for determining TDS is not approved, the permittee shall measure and record the cooling tower water TDS content monthly.

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.**# 005 [25 Pa. Code §127.1]****Purpose.**

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall operate the drift eliminator at all times that the Source ID 203 cooling tower is operating.

006 [25 Pa. Code §127.1]**Purpose.**

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall install, operate and maintain the Source ID 203 cooling tower and its associated drift eliminator in accordance with the manufacturer's recommendations/specifications, as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

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

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

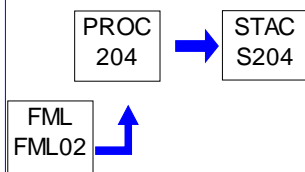
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 204

Source Name: EMERGENCY CI GENERATOR (2000KW)

Source Capacity/Throughput: 161.000 Gal/HR Diesel Fuel

**I. RESTRICTIONS.****Fuel Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generator shall fire only ultralow sulfur diesel fuel. The sulfur content of the diesel fuel shall not exceed 0.0015% by weight.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generator operating hours shall not exceed 100 hours of non-emergency operation in any consecutive 12-month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the fuel certification reports for each delivery of diesel 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).

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).

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

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Am I subject to this subpart?**

§60.4200 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) [NA – NOT AN ENGINE MANUFACTURER]

(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) [NA – NOT FIRE PUMP ENGINES]

(3) [NA – NOT MODIFIED/RECONSTRUCTED].

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) [NA - NOT STATIONARY CI ICE TEST CELL/STAND]

(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) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) [NA – NOT TEMPORARY REPLACEMENT UNITS]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

EMISSION STANDARDS FOR MANUFACTURERS

§60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer? [NA – NOT AN ENGINE MANUFACTURER]

§60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer? [NA – NOT AN ENGINE MANUFACTURER]

§60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines? [NA – NOT AN ENGINE MANUFACTURER]

EMISSION STANDARDS FOR OWNERS AND OPERATORS

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine? [NA – UNITS ARE EMERGENCY]

**SECTION D. Source Level Requirements**

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) [NA – UNIT(S) POST 2007]

(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. [IN ACCORDANCE WITH SECTIONS 60.4202(a)(2) THE EMERGENCY GENERATOR(S) IN THIS GROUP ARE SUBJECT TO 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, AS PRESENTED BELOW

40 CFR §89.112(a) Table 1 Emission Standards for units with a rated power of kW >560, Tier 2 starting with Model Year 2006:

NonMethane Hydrocarbons +		
Nitrogen Oxides (NMHC + NOx):	4.8 g/hp-hr	(6.4 g/kW-hr)
Carbon Monoxide (CO):	2.6 g/hp-hr	(3.5 g/kW-hr)
Particulate Matter (PM):	0.1 g/hp-hr	(0.2 g/kW-hr)

Exhaust opacity from the above compression-ignition nonroad engine for which this subpart is applicable must not exceed the following:

20 percent during the acceleration mode;
15 percent during the lugging mode; and
50 percent during the peaks in either the acceleration or lugging modes.

(c) thru (f) - N/A (ENGINES DO NOT MEET THE SIZE, DISPLACEMENT, OR TYPE OF ENGINE AS SPECIFIED)

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4206 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.

[76 FR 37969, June 28, 2011]

FUEL REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) [NA AS OF 6/1/12 PER (d)]

(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) [NA – UNITS < 30 L/CYL]

**SECTION D. Source Level Requirements**

(e) [NA – NO NATIONAL SECURITY EXEMPTION]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

OTHER REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(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) – (g) [NA – SPECIFIED DETAILS DO NOT APPLY]

(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.

(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.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4209 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) [NA – NO DIESEL PARTICULATE FILTERS].

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

COMPLIANCE REQUIREMENTS

§60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer? [NA – NOT AN ENGINE MANUFACTURER]

§60.4211 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) [NA – UNIT(S) > 2007 YEAR]

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply

**SECTION D. Source Level Requirements**

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) [NA – SPECIFIED SECTIONS DO NOT APPLY]

(e) [NA – UNIT(S) NOT MODIFIED OR RECONSTRUCTED AFTER 7/11/05]

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

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

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

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

(ii) – (iii) [VACATED BY COURT ORDER AS OF 5/2/16]

(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

**SECTION D. Source Level Requirements**

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) [NA – UNIT(S) > 100 HP]

(2) [NA – UNIT(S) > 500 HP]

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

(h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

TESTING REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4212 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? [NA – TESTING NOT REQUIRED FOR CERTIFIED UNITS WHICH ARE NOT ALTERED PER 60.4211(g)]

§60.4213 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 greater than or equal to 30 liters per cylinder? [NA – DISPLACEMENT < 30 L/CYL]

NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

§60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) [NA – UNIT(S) ARE EMERGENCY]

(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) [NA – NO DIESEL PARTICULATE FILTER(S)]

(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

**SECTION D. Source Level Requirements**

§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.

(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) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vii) 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.

(e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

SPECIAL REQUIREMENTS

§60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands? [NA – ENGINE(S) DO NOT MEET SPECIFIED GEOGRAPHY]

§60.4216 What requirements must I meet for engines used in Alaska? [NA – ENGINE(S) DO NOT MEET SPECIFIED GEOGRAPHY]

§60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels? [NA – ENGINE(S) DO NOT USE SPECIAL FUELS]

GENERAL PROVISIONS

§60.4218 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. [TABLE 8 INCORPORATED BY REFERENCE]

DEFINITIONS [INCORPORATED BY REFERENCE]

**SECTION D. Source Level Requirements****REPORTING ADDRESSES & REGULATORY CHANGES**

Individual sources within this source group that are subject to 40 CFR Part 60 Subpart IIII shall comply with all applicable requirements of the Subpart. 40 CFR 60.4 requires submission of copies of all requests, reports and other communications to the Department and/or the EPA, as may be required. The EPA copies shall be forwarded to:

Director
Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiweaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

§63.6590 What parts of my plant does this subpart cover?

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

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

**SECTION E. Source Group Restrictions.**

Group Name: 001

Group Description: Source(s) Subject to NSPS Subpart KKKK

Sources included in this group

ID	Name
101	COMBINED CYCLE UNIT

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4300]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What is the purpose of this subpart?**

60.4300 What is the purpose of this subpart?

This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

Applicability

§60.4305 Does this subpart apply to my stationary combustion turbine?

(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this

**SECTION E. Source Group Restrictions.**

part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

§60.4310 What types of operations are exempt from these standards of performance?

- (a) [N/A - NOT EMERGENCY COMBUSTION TURBINE]
- (b) [N/A - NOT ENGAGED IN RESEARCH AND DEVELOPMENT]
- (c) [N/A - NOT SUBJECT TO SUBPART Da]
- (d) [N/A - NO TURBINE TEST CELL/STANDS]

Emission Limits

§60.4315 What pollutants are regulated by this subpart?

The pollutants regulated by this subpart are nitrogen oxide (NO_x) and sulfur dioxide (SO₂).

§60.4320 What emission limits must I meet for nitrogen oxides (NO_x)?

- (a) You must meet the emission limits for NO_x specified in Table 1 to this subpart. [FOR A NEW COMBUSTION TURBINE FIRING NATURAL GAS AND HAVING A HEAT INPUT AT PEAK LOAD (HIGHER HEATING VALUE) OF GREATER THAN 850 mmBTU/hr, THE NO_x EMISSION STANDARD = 15 ppm @ 15% O₂ or 54 ng/J of useful output (0.43 lb/MWh)]
- (b) [N/A - ONE COMBUSTION TURBINE IS CONNECTED TO THE GENERATOR]

§60.4325 What emission limits must I meet for NO_x if my turbine burns both natural gas and distillate oil (or some other combination of fuels)?

[N/A - TURBINE BURNS ONLY NATURAL GAS]

§60.4330 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 - THE COMBUSTION TURBINE DOES NOT BURN BIOGAS]
- (b) [N/A - THE COMBUSTION TURBINE IS NOT LOCATED IN A NONCONTINENTAL AREA OR A CONTINENTAL AREA THAT THE ADMINISTRATOR DETERMINES DOES NOT HAVE ACCESS TO NATURAL GAS]

[71 FR 38497, July 6, 2006, as amended at 74 FR 11861, Mar. 20, 2009]

General Compliance Requirements

§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

**SECTION E. Source Group Restrictions.**

equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(b) [N/A - COMBUSTION TURBINE HAS A DEDICATED HEAT RECOVERY STEAM GENERATOR]

Monitoring

§60.4335 How do I demonstrate compliance for NO_x if I use water or steam injection?

(a) [N/A - TURBINE DOES NOT USE WATER OR STEAM INJECTION]

(b) Alternatively, you may use continuous emission monitoring, as follows:

(1) Install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO_x monitor and a diluent gas (oxygen (O₂) or carbon dioxide (CO₂)) monitor, to determine the hourly NO_x emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu); and

(2) For units complying with the output-based standard, install, calibrate, maintain, and operate a fuel flow meter (or flow meters) to continuously measure the heat input to the affected unit; and

(3) For units complying with the output-based standard, install, calibrate, maintain, and operate a watt meter (or meters) to continuously measure the gross electrical output of the unit in megawatt-hours; and

(4) For combined heat and power units complying with the output-based standard, install, calibrate, maintain, and operate meters for useful recovered energy flow rate, temperature, and pressure, to continuously measure the total thermal energy output in British thermal units per hour (Btu/h).

§60.4340 How do I demonstrate continuous compliance for NO_x 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. [SEE PART (b)(1), BELOW]

(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 - CONTINUOUS PARAMETER MONITORING NOT UTILIZED]

§60.4345 What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?

If the option to use a NO_x CEMS is chosen:

(a) Each NO_x 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 NO_x 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 NO_x 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

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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 NO_x 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.

§60.4350 How do I use data from the continuous emission monitoring equipment to identify excess emissions?

For purposes of identifying 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 NO_x and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO_x 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 NO_x concentrations to 15 percent O₂ is not allowed.

(d) If you have installed and certified a NO_x 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 NO_x 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) For simple-cycle operation: [THE COMBUSTION TURBINE IS NOT A SIMPLE-CYCLE UNIT; IT IS A COMBINED-CYCLE UNIT WITH HEAT RECOVERY; HOWEVER, EQUATION 1, BELOW, IS DEFINED SINCE IT IS REFERENCED IN 40 CFR §60.4350(f)(2), BELOW]:

$$E = [(NO_x)_h * (HI)_h] / P \quad (\text{Equation 1})$$

Where:

E = hourly NO_x emission rate, in lb/MWh,

(NO_x)_h = hourly NO_x emission rate, in lb/MMBtu,

(HI)_h = hourly heat input rate to the unit, in MMBtu/h, measured using the fuel flowmeter(s), e.g., calculated using Equation D-15a in appendix D to part 75 of this chapter, and

P = gross energy output of the combustion turbine in MW.

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(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 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, as in the following equations:

$$P = (Pe)t + (Pe)c + Ps + Po \quad (\text{Equation 2})$$

Where:

P = gross energy output of the stationary combustion turbine system in MW.

(Pe)t = electrical or mechanical energy output of the combustion turbine in MW,

(Pe)c = electrical or mechanical energy output (if any) of the steam turbine in MW, and

$$Ps = (Q * H) / (3,413,000 \text{ BTU/MWh}) \quad (\text{Equation 3})$$

Where:

Ps = useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MW,

Q = measured steam flow rate in lb/h,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb, and 3,413,000 = conversion from Btu/h to MW.

Po = other useful heat recovery, measured relative to ISO conditions, not used for steam generation or performance enhancement of the combustion turbine.

(3) [N/A - THE COMBUSTION TURBINE IS NOT DESIGNED FOR MECHANICAL DRIVE APPLICATIONS]

(g) [N/A - THE COMBUSTION TURBINE IS NOT A SIMPLE-CYCLE UNIT; IT IS A COMBINED-CYCLE UNIT WITH HEAT RECOVERY]

(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).

§60.4355 [N/A - CONTINUOUS PARAMETER MONITORING NOT UTILIZED]

§60.4360 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.

§60.4365 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

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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) [N/A - THE SULFUR CONTENT WILL BE MONITORED BY THE METHOD IN 60.4365(a)]

§60.4370 How often must I determine the sulfur content of the fuel?

The frequency of determining the sulfur content of the fuel must be as follows:

(a) [N/A - FUEL OIL IS NOT BURNED, ONLY NATURAL GAS]

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

(c) Custom schedules. Notwithstanding the requirements of paragraph (b) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.4330.

(1) The two custom sulfur monitoring schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of this section are acceptable, without prior Administrative approval:

(i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable.

(ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.

(iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:

(A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(B) of this section.

(B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(C) of this section.

(C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, continue to monitor at this frequency.

(iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur

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content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (c)(1)(ii) or (iii) of this section shall be followed.

(2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

(i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.

(ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.

(iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iii) of this section.

(iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iv) of this section.

Reporting

§60.4375 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.

§60.4380 How are excess emissions and monitor downtime defined for NOx?

For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

(a) [N/A - THE COMBUSTION TURBINE DOES NOT EMPLOY WATER OR STEAM-TO-FUEL RATIO MONITORING]

(b) For turbines using continuous emission monitoring, as described in §§60.4335(b) and 60.4345:

(1) An excess emissions is any unit operating period in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a "4-hour rolling average NOx emission rate" is the arithmetic average of the average NOx emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NOx emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of this subpart, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours.

(2) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes.

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(3) For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

(c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NO_x emission controls:

(1) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

§60.4385 How are excess emissions and monitoring downtime defined for SO₂?

If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

(a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(b) [FUEL OIL IS NOT BURNED, ONLY NATURAL GAS]

(c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

§60.4390 What are my reporting requirements if I operate an emergency combustion turbine or a research and development turbine?

[N/A - NO EMERGENCY COMBUSTION TURBINE OR RESEARCH AND DEVELOPMENT TURBINE]

§60.4395 When must I submit my reports?

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

Performance Tests

§60.4400 How do I conduct the initial and subsequent performance tests, regarding NO_x?

(a) You must conduct an initial performance test, as required in §60.8. Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_x emission rate:

$$E = [0.0000001194 * (NO_x)_c * Q_{std}] / P \quad (\text{Equation 5})$$

Where:

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E = NO_x emission rate, in lb/MWh

0.0000001194 = conversion constant, in lb/dscf-ppm

(NO_x)_c = average NO_x concentration for the run, in ppm

Q_{std} = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(ii) Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_x emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_x emission rate in lb/MWh.

(2) Sampling traverse points for NO_x and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

(i) You may perform a stratification test for NO_x and diluent pursuant to

(A) [Reserved], or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NO_x concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO₂ (or O₂) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_x concentration during the stratification test; or

(B) [N/A - NO_x STANDARD LESS THAN 15 PPM]; or

(C) For turbines with a NO_x standard less than or equal to 15 ppm @ 15% O₂, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO₂ (or O₂) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) [N/A - COMBUSTION TURBINE BURNS ONLY NG]

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(2) [N/A - DUCT BURNER NOT UTILIZED]

(3) [N/A - THE COMBUSTION TURBINE DOES NOT EMPLOY WATER OR STEAM INJECTION]

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_x emission rate at each tested level meets the applicable emission limit in §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

(6) The ambient temperature must be greater than 0 °F during the performance test.

§60.4405 How do I perform the initial performance test if I have chosen to install a NO_x diluent CEMS?

If you elect to install and certify a NO_x-diluent CEMS under §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

(a) Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs.

(b) For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit.

(c) Use the test data both to demonstrate compliance with the applicable NO_x emission limit under §60.4320 and to provide the required reference method data for the RATA of the CEMS described under §60.4335.

(d) Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NO_x emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

§60.4410 [N/A - CONTINUOUS PARAMETER MONITORING NOT UTILIZED]

§60.4415 How do I conduct the initial and subsequent performance tests for sulfur?

(a) You must conduct an initial performance test, as required in §60.8. Subsequent SO₂ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(i) [N/A - NO LIQUID FUELS BURNED]

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

(2) Measure the SO₂ concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO₂ emission rate:

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$$E = [0.0000001664 * (SO_2)_c * Q_{std}] / P \quad (\text{Equation 6})$$

Where:

E = SO₂ emission rate, in lb/MWh

0.0000001664 = conversion constant, in lb/dscf-ppm

(SO₂)_c = average SO₂ concentration for the run, in ppm

Q_{std} = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(3) Measure the SO₂ and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see §60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO₂ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the SO₂ emission rate in lb/MWh.

(b) [Reserved]

Reporting Addresses & Regulatory Changes

Individual sources within this source group that are subject to 40 CFR Part 60 Subpart KKK shall comply with all applicable requirements of the Subpart. 40 CFR Part 60.4 requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director
Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiveaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

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

**SECTION E. Source Group Restrictions.**

Group Name: 002

Group Description: Source(s) Subject to CEMS Requirements

Sources included in this group

ID	Name
101	COMBINED CYCLE UNIT

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.**# 001 [25 Pa. Code §123.51]****Monitoring requirements**

(a) This condition (25 Pa. Code §123.51) applies to combustion units with a rated heat input of 250 mMBTU/hr or greater and with an annual average capacity factor of greater than 30%.

(b) Sources subject to this condition (25 Pa. Code §123.51) shall install, operate and maintain continuous nitrogen oxides (NOx) 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 statutory sources).

(c) Sources subject to this condition (25 Pa. Code §123.51) 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 NOx monitoring systems installed under the requirements of this condition (25 Pa. Code §123.51) shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

(e) The Department may exempt a source from the requirements of part (b), above, if the Department determines that the installation of a continuous emissions monitoring system would not provide accurate determination of emissions or that installation of a continuous emissions 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 part (b), above, shall satisfy alternative emissions monitoring and reporting requirements proposed by the source and approved by the Department which provide NOx emissions data that is representative of actual emissions of the source.

(f) Sources subject to this condition (25 Pa. Code §123.51) 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 condition (25 Pa. Code §123.51). 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.

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

(a) The following continuous emissions monitoring system(s) [CEMS(s)] 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) CEMS #1

(a) Source to be Monitored: Source ID 101

**SECTION E. Source Group Restrictions.**

(b) Parameter to be Reported: CO

(c) Units of Measurement to be Reported: ppmvd

(d) Moisture Basis of Measurement to be Reported: dry

(e) Correction basis of Measurement to be Reported: 15% O₂

(f) Data Substitution Required: No

(g) Emission Standards

(1) Emission Standard #1

(a) Emission Standard Averaging Period Description: 3-hour block average

(b) Emission Standard Value: 2.0 ppmvd corrected to 15% O₂

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

(d) Variable Emission Standard: Yes

(2) CEMS #2

(a) Source to be Monitored: Source ID 101

(b) Parameter to be Reported: NO_x (expressed in terms of NO₂)

(c) Units of Measurement to be Reported: ppmvd

(d) Moisture Basis of Measurement to be Reported: dry

(e) Correction basis of Measurement to be Reported: 15% O₂

(f) Data Substitution Required: No

(g) Emission Standards

(1) Emission Standard #1

(a) Emission Standard Averaging Period Description: 3-hour block average

(b) Emission Standard Value: 2.0 ppmvd corrected to 15% O₂

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

(d) Variable Emission Standard: Yes

(b) Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and this plan approval condition.

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

The permittee shall maintain fuel flow meters for the combustion turbine in accordance with the requirements of 40 CFR Part 75. The fuel flow will be measured in accordance with 40 CFR Part 75, Appendix D, requirements in lieu of continuous SO₂ pollutant concentration and flow monitors for the purpose of determining hourly SO₂ (and other non-CEM-monitored pollutants) mass emissions and heat input.

**SECTION E. Source Group Restrictions.****# 004 [25 Pa. Code §139.101]****General requirements.**

This condition (25 Pa. Code §139.101) applies to monitoring systems as defined in the manual referenced at 25 Pa. Code §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 Air Pollution Control 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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). 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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

(6) The owner of a monitored source shall provide permanent sampling facilities as specified in 25 Pa. Code §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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 25 Pa. Code §139.102.

(9) The Department's approval will be based on the criteria specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 one (1) hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within two (2) hours of the malfunction.

**SECTION E. Source Group Restrictions.**

(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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 Title 25 (Chapters 121 - 145), in a plan approval condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under Section 4 of the Air Pollution Control Act. For purposes of calculating data availability, "process down" time, as specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §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 condition (25 Pa. Code §139.101) apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

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

[Additional authority for this plan approval condition is also derived from 25 Pa. Code §§139.101(5), 139.101(12), 139.103, 139.108, and 139.111]]

(a) The permittee shall comply with the recordkeeping 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 in Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001).

(b) The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

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

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

[Additional authority for this plan approval condition is also derived from 25 Pa. Code §§139.101(1)(iv), 139.101(10), 139.101(12), 139.103, 139.108, and 139.111]]

(a) The permittee shall submit quarterly reports of continuous emissions 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 Revision No. 8 of the

**SECTION E. Source Group Restrictions.**

Department's Continuous Source Monitoring Manual (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 permittee, in writing, of the approval of the continuous emissions monitoring system (CEMS) 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 emissions monitoring within the time periods specified in this condition shall constitute violations of this plan approval, 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 plan approval condition.

VI. WORK PRACTICE REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this plan approval condition is also derived from 25 Pa. Code §§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 Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001).

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

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

(1) In accordance with 25 Pa. Code §139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this 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 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 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and this plan approval condition.

(3) Emission Standards To Which Data Availability Standards apply:

(a) CO (ppmvd @ 15% O₂)

(b) NO_x (ppmvd @ 15% O₂; expressed as NO₂)

**SECTION E. Source Group Restrictions.****VII. ADDITIONAL REQUIREMENTS.****# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this plan approval condition is also derived from 25 Pa. Code §127.441(c), Chapter 139, §§114(a)(3) & 504(b) of the Clean Air Act]

Sampling, Testing and Monitoring Procedures

(a) 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.

(b) Unless otherwise required by this plan approval, 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 plan approval.

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

**SECTION E. Source Group Restrictions.**

Group Name: 003

Group Description: Source(s) Subject to Cross-State Air Pollution Rule (CSAPR) Requirements

Sources included in this group

ID	Name
101	COMBINED CYCLE UNIT

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

Description of Transport Rule (TR) Monitoring Provisions

The TR subject units, and the unit-specific monitoring provisions at this source, are identified below. These units are subject to the requirements for the TR NOx Annual Trading Program, TR NOx Ozone Season Trading Program, TR SO2 Group 1 Trading Program and TR SO2 Group 2 Trading Program.

COMBINED CYCLE UNIT:

SO2: Excepted monitoring system requirements for gas-and oil-fired units pursuant to 40 CFR Part 75, Appendix D

NOx: Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for NOx monitoring) and 40 CFR Part 75, Subpart H (for NOx monitoring)

HEAT INPUT: Excepted monitoring system requirements for gas-and oil-fired units pursuant to 40 CFR Part 75, Appendix D

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§97.430 through 97.435 (TR NOx Annual Trading Program), §§97.530 through 97.535 (TR NOx Ozone Season Trading Program), §§97.630 through 97.635 (TR SO2 Group 1 Trading Program) and §§97.730 through 97.735 (TR SO2 Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.

2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <http://www.epa.gov/airmarkets/emissions/monitoringplans.html>.

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR §§75.66 and §§97.435 (TR NOx Annual Trading Program), §§97.535 (TR NOx Ozone Season Trading Program), §§97.635 (TR SO2 Group 1 Trading Program) and §§97.735 (TR SO2 Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.

4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§97.430 through 97.434 (TR NOx Annual Trading Program), §§97.530 through 97.534 (TR NOx Ozone Season Trading Program), §§97.630 through 97.635 (TR SO2 Group 1 Trading Program) and §§97.730 through 97.735 (TR SO2 Group 2 Trading Program), must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR §§75.66 and §§97.435 (TR NOx Annual Trading Program), §§97.535 (TR NOx Ozone Season Trading

**SECTION E. Source Group Restrictions.**

Program), §§97.635 (TR SO₂ Group 1 Trading Program) and §§97.735 (TR SO₂ Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR §§97.430 through 97.434 (TR NO_x Annual Trading Program), §§97.530 through 97.534 (TR NO_x Ozone Season Trading Program), §§97.630 through 97.635 (TR SO₂ Group 1 Trading Program) and §§97.730 through 97.735 (TR SO₂ Group 2 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR §70.7(e)(2)(i)(B) or §71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The combustion turbine is subject to the Transport Rule (TR) Trading Program Title V Requirements outlined in this Source Group.

(b) The Transport Rule (TR) is also known as the "Cross-State Air Pollution Rule" (CSAPR). It includes the regulations found at 40 CFR §§52.38, 52.39, 52.2040 and 52.2041, and 40 CFR Part 97, Subparts AAAAA, BBBBB, CCCCC and DDDDD (relating to TR NO_x Annual trading program; TR NO_x Ozone Season trading program; TR SO₂ Group 1 trading program; TR SO₂ Group 2 trading program).

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

Transport Rule (TR) NO_x Annual Trading Program requirements (40 CFR 97.406)

§97.406 Standard requirements.

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements. (1) The owners and operators, and the designated representative, of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.430 through 97.435.

(2) The emissions data determined in accordance with §§97.430 through 97.435 shall be used to calculate allocations of TR NO_x Annual allowances under §§97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_x Annual emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

**SECTION E. Source Group Restrictions.**

(c) NOX emissions requirements. (1) TR NOX Annual emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOX Annual source and each TR NOX Annual unit at the source shall hold, in the source's compliance account, TR NOX Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NOX emissions for such control period from all TR NOX Annual units at the source.

(ii) If total NOX emissions during a control period in a given year from the TR NOX Annual units at a TR NOX Annual source are in excess of the TR NOX Annual emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR NOX Annual unit at the source shall hold the TR NOX Annual allowances required for deduction under §97.424(d); and

(B) The owners and operators of the source and each TR NOX Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR NOX Annual assurance provisions. (i) If total NOX emissions during a control period in a given year from all TR NOX Annual units at TR NOX Annual sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOX emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NOX Annual allowances available for deduction for such control period under §97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.425(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NOX emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NOX emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR NOX Annual allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NOX emissions exceed the sum, for such control period, of the State NOX Annual trading budget under §97.410(a) and the State's variability limit under §97.410(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NOX emissions from the TR NOX Annual units at TR NOX Annual sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR NOX Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

**SECTION E. Source Group Restrictions.**

(B) Each TR NOX Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. (i) A TR NOX Annual unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter.

(ii) A TR NOX Annual unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR NOX Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR NOX Annual allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR NOX Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR NOX Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NOX Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) Limited authorization. A TR NOX Annual allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR NOX Annual Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NOX Annual allowance does not constitute a property right.

(d) Title V permit requirements. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Annual allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report NOX emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) Additional recordkeeping and reporting requirements. (1) Unless otherwise provided, the owners and operators of each TR NOX Annual source and each TR NOX Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under §97.416 for the designated representative for the source and each TR NOX Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.416 changing the designated representative.

**SECTION E. Source Group Restrictions.**

- (ii) All emissions monitoring information, in accordance with this subpart.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NOX Annual Trading Program.
- (2) The designated representative of a TR NOX Annual source and each TR NOX Annual unit at the source shall make all submissions required under the TR NOX Annual Trading Program, except as provided in §97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.
- (f) Liability. (1) Any provision of the TR NOX Annual Trading Program that applies to a TR NOX Annual source or the designated representative of a TR NOX Annual source shall also apply to the owners and operators of such source and of the TR NOX Annual units at the source.
- (2) Any provision of the TR NOX Annual Trading Program that applies to a TR NOX Annual unit or the designated representative of a TR NOX Annual unit shall also apply to the owners and operators of such unit.
- (g) Effect on other authorities. No provision of the TR NOX Annual Trading Program or exemption under §97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOX Annual source or TR NOX Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

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

Transport Rule (TR) NOx Ozone Season Trading Program Requirements (40 CFR §97.506)

§97.506 Standard requirements.

- (a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.513 through 97.518.
- (b) Emissions monitoring, reporting, and recordkeeping requirements. (1) The owners and operators, and the designated representative, of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.530 through 97.535.
- (2) The emissions data determined in accordance with §§97.530 through 97.535 shall be used to calculate allocations of TR NOX Ozone Season allowances under §§97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NOX Ozone Season emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
- (c) NOX emissions requirements. (1) TR NOX Ozone Season emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall hold, in the source's compliance account, TR NOX Ozone Season allowances available for deduction for such control period under §97.524(a) in an amount not less than the tons of total NOX emissions for such control period from all TR NOX Ozone Season units at the source.
- (ii) If total NOX emissions during a control period in a given year from the TR NOX Ozone Season units at a TR NOX Ozone Season source are in excess of the TR NOX Ozone Season emissions limitation set forth in paragraph (c)(1)(i) of this section, then:
- (A) The owners and operators of the source and each TR NOX Ozone Season unit at the source shall hold the TR NOX Ozone Season allowances required for deduction under §97.524(d); and
- (B) The owners and operators of the source and each TR NOX Ozone Season unit at the source shall pay any fine, penalty,

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or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR NOX Ozone Season assurance provisions. (i) If total NOX emissions during a control period in a given year from all TR NOX Ozone Season units at TR NOX Ozone Season sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOX emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NOX Ozone Season allowances available for deduction for such control period under §97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.525(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NOX emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NOX emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the TR NOX Ozone Season allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NOX emissions exceed the sum, for such control period, of the State NOX Ozone Season trading budget under §97.510(a) and the State's variability limit under §97.510(b).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NOX emissions from the TR NOX Ozone Season units at TR NOX Ozone Season sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold TR NOX Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NOX Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) Compliance periods. (i) A TR NOX Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.530(b) and for each control period thereafter.

(ii) A TR NOX Ozone Season unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance. (i) A TR NOX Ozone Season allowance held for compliance with the

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requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR NOX Ozone Season allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR NOX Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR NOX Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NOX Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) Limited authorization. A TR NOX Ozone Season allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR NOX Ozone Season Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NOX Ozone Season allowance does not constitute a property right.

(d) Title V permit requirements. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Ozone Season Group 1 allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report NOX emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.530 through 97.535 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) Additional recordkeeping and reporting requirements. (1) Unless otherwise provided, the owners and operators of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under §97.516 for the designated representative for the source and each TR NOX Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.516 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NOX Ozone Season Trading Program.

(2) The designated representative of a TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall make all submissions required under the TR NOX Ozone Season Trading Program, except as provided in §97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) Liability. (1) Any provision of the TR NOX Ozone Season Trading Program that applies to a TR NOX Ozone Season source or the designated representative of a TR NOX Ozone Season source shall also apply to the owners and operators of such

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source and of the TR NOX Ozone Season units at the source.

(2) Any provision of the TR NOX Ozone Season Trading Program that applies to a TR NOX Ozone Season unit or the designated representative of a TR NOX Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities. No provision of the TR NOX Ozone Season Trading Program or exemption under §97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOX Ozone Season source or TR NOX Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

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

TR SO2 Group 1 Trading Program requirements (40 CFR §97.606)

§97.606 Standard requirements.

(a) Designated representative requirements. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements. (1) The owners and operators, and the designated representative, of each TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.630 through 97.635.

(2) The emissions data determined in accordance with §§97.630 through 97.635 shall be used to calculate allocations of TR SO2 Group 1 allowances under §§97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO2 Group 1 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO2 emissions requirements. (1) TR SO2 Group 1 emissions limitation. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO2 Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO2 emissions for such control period from all TR SO2 Group 1 units at the source.

(ii) If total SO2 emissions during a control period in a given year from the TR SO2 Group 1 units at a TR SO2 Group 1 source are in excess of the TR SO2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each TR SO2 Group 1 unit at the source shall hold the TR SO2 Group 1 allowances required for deduction under §97.624(d); and

(B) The owners and operators of the source and each TR SO2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) TR SO2 Group 1 assurance provisions. (i) If total SO2 emissions during a control period in a given year from all TR SO2 Group 1 units at TR SO2 Group 1 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO2 emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO2 Group 1 allowances available for deduction for such control period under §97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.625(b), of multiplying—

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- (A) The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
- (B) The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.
- (ii) The owners and operators shall hold the TR SO₂ Group 1 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii) Total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total SO₂ emissions exceed the sum, for such control period, of the State SO₂ Group 1 trading budget under §97.610(a) and the State's variability limit under §97.610(b).
- (iv) It shall not be a violation of this subpart or of the Clean Air Act if total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.
- (v) To the extent the owners and operators fail to hold TR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,
- (A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
- (B) Each TR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.
- (3) Compliance periods. (i) A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter.
- (ii) A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance. (i) A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
- (ii) A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.
- (6) Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i) Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program; and

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- (ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO₂ Group 1 allowance does not constitute a property right.
- (d) Title V permit requirements. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with this subpart.
- (2) A description of whether a unit is required to monitor and report SO₂ emissions using a continuous emission monitoring system (under subpart B of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.
- (e) Additional recordkeeping and reporting requirements. (1) Unless otherwise provided, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
- (i) The certificate of representation under §97.616 for the designated representative for the source and each TR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.616 changing the designated representative.
- (ii) All emissions monitoring information, in accordance with this subpart.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO₂ Group 1 Trading Program.
- (2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ Group 1 Trading Program, except as provided in §97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.
- (f) Liability. (1) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.
- (2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.
- (g) Effect on other authorities. No provision of the TR SO₂ Group 1 Trading Program or exemption under §97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO₂ Group 1 source or TR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

TR SO₂ Group 2 Trading Program requirements (40 CFR §97.706)

[NA - IT DOES NOT APPLY TO SOURCES IN PA]



SECTION E. Source Group Restrictions.

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

**SECTION E. Source Group Restrictions.**

Group Name: 004

Group Description: Source(s) Subject of NSPS Subpart TTTT

Sources included in this group

ID	Name
101	COMBINED CYCLE UNIT

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

§60.5508 What is the purpose of this subpart?

This subpart establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions from a steam generating unit, IGCC, or a stationary combustion turbine that commences construction after January 8, 2014 or commences modification or reconstruction after June 18, 2014. An affected steam generating unit, IGCC, or stationary combustion turbine shall, for the purposes of this subpart, be referred to as an affected EGU.

§60.5509 Am I subject to this subpart?

(a) Except as provided in paragraph (b) of this section, the GHG standards included in this subpart apply to any steam generating unit, IGCC, or stationary combustion turbine that commenced construction after January 8, 2014 or commenced reconstruction after June 18, 2014 that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section. The GHG standards included in this subpart also apply to any steam generating unit or IGCC that commenced modification after June 18, 2014 that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section.

(1) Has a base load rating greater than 260 GJ/h (250 MMBtu/h) of fossil fuel (either alone or in combination with any other fuel); and

(2) Serves a generator or generators capable of selling greater than 25 MW of electricity to a utility power distribution

**SECTION E. Source Group Restrictions.**

system.

(b) You are not subject to the requirements of this subpart if your affected EGU meets any of the conditions specified in paragraphs (b)(1) through (10) of this section.

(1) [N/A – ELECTRICAL SALES ARE NOT LIMITED]

(2) [N/A – TURBINE ONLY BURNS NATURAL GAS]

(3) [N/A – ELECTRICAL SALES ARE NOT LIMITED]

(4) [N/A – GENERATION CAPACITY IS GREATER THAN 25 MW]

(5) [N/A – NOT A MUNICIPAL WASTE COMBUSTOR]

(6) [N/A – NOT A SOLID WASTE INCINERATOR]

(7) [N/A – NO MODIFICATIONS RESULTING IN CO₂ INCREASE OF 10 PERCENT OR LESS]

(8) [N/A – COMBUSTION TURBINE BURNS NATURAL GAS]

(9) [N/A – NOT THE WASHINGTON COUNTY PROJECT]

(10) [N/A – NOT THE HOLCOMB EGU PROJECT]

EMISSION STANDARDS

§60.5515 Which pollutants are regulated by this subpart?

(a) The pollutants regulated by this subpart are greenhouse gases. The greenhouse gas standard in this subpart is in the form of a limitation on emission of carbon dioxide.

(b) [N/A – BASED ON THE FACILITY EMISSION LIMITS THE PSD AND TITLE V CONDITIONS DO NOT APPLY]

§60.5520 What CO₂ emission standard must I meet?

(a) For each affected EGU subject to this subpart, you must not discharge from the affected EGU any gases that contain CO₂ in excess of the applicable CO₂ emission standard specified in table 1 or 2 of this subpart, consistent with paragraphs (b), (c), and (d) of this section, as applicable.

TABLE 2 REQUIREMENT

CO₂ emission standard is 450 kg/MWh of gross energy output (1,000 lb CO₂/MWh)

END OF TABLE 2 REQUIREMENT

(b) Except as specified in paragraphs (c) and (d) of this section, you must comply with the applicable gross energy output standard, and your operating permit must include monitoring, recordkeeping, and reporting methodologies based on the applicable gross energy output standard. For the remainder of this subpart (for sources that do not qualify under paragraphs (c) and (d) of this section), where the term “gross or net energy output” is used, the term that applies to you is “gross energy output.”

(c) [N/A – FACILITY HAS ELECTED NOT TO APPLY FOR THE NET ENERGY OUTPUT STANDARD]

(d) [N/A – FACILITY IS NOT SUBJECT TO A HEAT INPUT-BASED STANDARD]

GENERAL COMPLIANCE REQUIREMENTS

**SECTION E. Source Group Restrictions.**

§60.5525 What are my general requirements for complying with this subpart?

Combustion turbines qualifying under §60.5520(d)(1) are not subject to any requirements in this section other than the requirement to maintain fuel purchase records for permitted fuel(s). For all other affected sources, compliance with the applicable CO₂ emission standard of this subpart shall be determined on a 12-operating-month rolling average basis. See table 1 or 2 of this subpart for the applicable CO₂ emission standards.

TABLE 2 REQUIREMENT

CO₂ emission standard is 450 kg/MWh of gross energy output (1,000 lb CO₂/MWh)

END OF TABLE 2 REQUIREMENT

(a) You must be in compliance with the emission standards in this subpart that apply to your affected EGU at all times. However, you must determine compliance with the emission standards only at the end of the applicable operating month, as provided in paragraph (a)(1) of this section.

(1) For each affected EGU subject to a CO₂ emissions standard based on a 12-operating-month rolling average, you must determine compliance monthly by calculating the average CO₂ emissions rate for the affected EGU at the end of the initial and each subsequent 12-operating-month period.

(2) [N/A – COMBUSTION TURBINE IS NOT SUBJECT TO INPUT-BASED CO₂ EMISSIONS STANDARD]

(b) At all times you must operate and maintain each affected EGU, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practice. The Administrator will determine if you are using consistent operation and maintenance procedures based on information available to the Administrator that may include, but is not limited to, fuel use records, monitoring results, review of operation and maintenance procedures and records, review of reports required by this subpart, and inspection of the EGU.

(c) Within 30 days after the end of the initial compliance period (i.e., no more than 30 days after the first 12-operating-month compliance period), you must make an initial compliance determination for your affected EGU(s) with respect to the applicable emissions standard in table 1 or 2 of this subpart, in accordance with the requirements in this subpart. The first operating month included in the initial 12-operating-month compliance period shall be determined as follows:

TABLE 2 REQUIREMENT

CO₂ emission standard is 450 kg/MWh of gross energy output (1,000 lb CO₂/MWh)

END OF TABLE 2 REQUIREMENT

(1) For an affected EGU that commences commercial operation (as defined in §72.2 of this chapter) on or after October 23, 2015, the first month of the initial compliance period shall be the first operating month (as defined in §60.5580) after the calendar month in which emissions reporting is required to begin under:

(i) Section 60.5555(c)(3)(i), for units subject to the Acid Rain Program; or

(ii) [N/A – UNIT IS SUBJECT TO ACID RAIN PROGRAM]

(2) [N/A – EGU WILL COMMENCE OPERATION AFTER OCTOBER 23, 2015]

(3) [N/A – EGU IS NOT MODIFIED OR RECONSTRUCTED]

MONITORING AND COMPLIANCE DETERMINATION PROCEDURES

§60.5535 How do I monitor and collect data to demonstrate compliance?

(a) Combustion turbines qualifying under §60.5520(d)(1) are not subject to any requirements in this section other than the

**SECTION E. Source Group Restrictions.**

requirement to maintain fuel purchase records for permitted fuel(s). If your combustion turbine uses non-uniform fuels as specified under §60.5520(d)(2), you must monitor heat input in accordance with paragraph (c)(1) of this section, and you must monitor CO₂ emissions in accordance with either paragraph (b), (c)(2), or (c)(5) of this section. For all other affected sources, you must prepare a monitoring plan to quantify the hourly CO₂ mass emission rate (tons/h), in accordance with the applicable provisions in §75.53(g) and (h) of this chapter. The electronic portion of the monitoring plan must be submitted using the ECMP Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under this subpart. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR (see §60.5555(c)).

(b) [N/A – COMBUSTION TURBINE IS NOT SUBJECT TO A HEAT INPUT-BASED STANDARD]

(c) [N/A – COMBUSTION TURBINE IS NOT SUBJECT TO A HEAT INPUT-BASED STANDARD]

(d) Consistent with §60.5520, you must determine the basis of the emissions standard that applies to your affected source in accordance with either paragraph (d)(1) or (2) of this section, as applicable:

(1) If you operate a source subject to an emissions standard established on an output basis (e.g., lb of CO₂ per gross or net MWh of energy output), you must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output or net electric output, as applicable, from the affected EGU(s). These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20 (incorporated by reference, see §60.17). For a combined heat and power (CHP) EGU, as defined in §60.5580, you must also install, calibrate, maintain, and operate meters to continuously (i.e., hour-by-hour) determine and record the total useful thermal output. For process steam applications, you will need to install, calibrate, maintain, and operate meters to continuously determine and record the hourly steam flow rate, temperature, and pressure. Your plan shall ensure that you install, calibrate, maintain, and operate meters to record each component of the determination, hour-by-hour.

(2) [N/A – EGU IS NOT SUBJECT TO AN EMISSION STANDARD BASED ON HEAT-INPUT]

(e) [N/A – ONE EGU SERVES THE ELECTRIC GENERATOR]

(f) [N/A – ONLY ONE EGU]

(g) [N/A – PARAGRAPH (b) OF THIS SECTION IS NOT APPLICABLE]

§60.5540 How do I demonstrate compliance with my CO₂ emissions standard and determine excess emissions?

(a) In accordance with §60.5520, if you are subject to an output-based emission standard or you burn non-uniform fuels as specified in §60.5520(d)(2), you must demonstrate compliance with the applicable CO₂ emission standard in table 1 or 2 of this subpart as required in this section. For the initial and each subsequent 12-operating-month rolling average compliance period, you must follow the procedures in paragraphs (a)(1) through (7) of this section to calculate the CO₂ mass emissions rate for your affected EGU(s) in units of the applicable emissions standard (i.e., either kg/MWh or lb/MMBtu). You must use the hourly CO₂ mass emissions calculated under §60.5535(b) or (c), as applicable, and either the generating load data from §60.5535(d)(1) for output-based calculations or the heat input data from §60.5535(d)(2) for heat-input-based calculations. Combustion turbines firing non-uniform fuels that contain CO₂ prior to combustion (e.g., blast furnace gas or landfill gas) may sample the fuel stream to determine the quantity of CO₂ present in the fuel prior to combustion and exclude this portion of the CO₂ mass emissions from compliance determinations.

(1) Each compliance period shall include only “valid operating hours” in the compliance period, i.e., operating hours for which:

(i) “Valid data” (as defined in §60.5580) are obtained for all of the parameters used to determine the hourly CO₂ mass emissions (kg) and, if a heat input-based standard applies, all the parameters used to determine total heat input for the hour are also obtained; and

PER 60.5580 - VALID DATA DEFINITION

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Valid data means quality-assured data generated by continuous monitoring systems that are installed, operated, and maintained according to part 75 of this chapter. For CEMS, the initial certification requirements in §75.20 of this chapter and appendix A to part 75 of this chapter must be met before quality-assured data are reported under this subpart; for on-going quality assurance, the daily, quarterly, and semiannual/annual test requirements in sections 2.1, 2.2, and 2.3 of appendix B to part 75 of this chapter must be met and the data validation criteria in sections 2.1.5, 2.2.3, and 2.3.2 of appendix B to part 75 of this chapter apply. For fuel flow meters, the initial certification requirements in section 2.1.5 of appendix D to part 75 of this chapter must be met before quality-assured data are reported under this subpart (except for qualifying commercial billing meters under section 2.1.4.2 of appendix D to part 75), and for on-going quality assurance, the provisions in section 2.1.6 of appendix D to part 75 apply (except for qualifying commercial billing meters).

END OF VALID DATA DEFINITION

(ii) The corresponding hourly gross or net energy output value is also valid data (Note: For hours with no useful output, zero is considered to be a valid value).

(2) You must exclude operating hours in which:

(i) The substitute data provisions of part 75 of this chapter are applied for any of the parameters used to determine the hourly CO₂ mass emissions or, if a heat input-based standard applies, for any parameters used to determine the hourly heat input; or

(ii) An exceedance of the full-scale range of a continuous emission monitoring system occurs for any of the parameters used to determine the hourly CO₂ mass emissions or, if applicable, to determine the hourly heat input; or

(iii) The total gross or net energy output (P_{gross/net}) or, if applicable, the total heat input is unavailable.

(3) For each compliance period, at least 95 percent of the operating hours in the compliance period must be valid operating hours, as defined in paragraph (a)(1) of this section.

(4) You must calculate the total CO₂ mass emissions by summing the valid hourly CO₂ mass emissions values from §60.5535 for all of the valid operating hours in the compliance period.

(5) Sources subject to output based standards. For each valid operating hour of the compliance period that was used in paragraph (a)(4) of this section to calculate the total CO₂ mass emissions, you must determine P_{gross/net} (the corresponding hourly gross or net energy output in MWh) according to the procedures in paragraphs (a)(5)(i) and (ii) of this section, as appropriate for the type of affected EGU(s). For an operating hour in which a valid CO₂ mass emissions value is determined according to paragraph (a)(1)(i) of this section, if there is no gross or net electrical output, but there is mechanical or useful thermal output, you must still determine the gross or net energy output for that hour. In addition, for an operating hour in which a valid CO₂ mass emissions value is determined according to paragraph (a)(1)(i) of this section, but there is no (i.e., zero) gross electrical, mechanical, or useful thermal output, you must use that hour in the compliance determination. For hours or partial hours where the gross electric output is equal to or less than the auxiliary loads, net electric output shall be counted as zero for this calculation.

(i) Calculate P_{gross/net} for your affected EGU using the following equation. All terms in the equation must be expressed in units of megawatt-hours (MWh). To convert each hourly gross or net energy output (consistent with §60.5520) value reported under part 75 of this chapter to MWh, multiply by the corresponding EGU or stack operating time.

REFER TO REGULATION FOR EQUATION 2

Where:

P_{gross/net} = In accordance with §60.5520, gross or net energy output of your affected EGU for each valid operating hour (as defined in §60.5540(a)(1)) in MWh.

(P_e)_{ST} = Electric energy output plus mechanical energy output (if any) of steam turbines in MWh.

(P_e)_{CT} = Electric energy output plus mechanical energy output (if any) of stationary combustion turbine(s) in MWh.

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(Pe)IE = Electric energy output plus mechanical energy output (if any) of your affected EGU's integrated equipment that provides electricity or mechanical energy to the affected EGU or auxiliary equipment in MWh.

(Pe)FW = Electric energy used to power boiler feedwater pumps at steam generating units in MWh. Not applicable to stationary combustion turbines, IGCC EGUs, or EGUs complying with a net energy output based standard.

(Pe)A = Electric energy used for any auxiliary loads in MWh. Not applicable for determining Pgross.

(Pt)PS = Useful thermal output of steam (measured relative to SATP conditions, as applicable) that is used for applications that do not generate additional electricity, produce mechanical energy output, or enhance the performance of the affected EGU. This is calculated using the equation specified in paragraph (a)(5)(ii) of this section in MWh.

(Pt)HR = Non steam useful thermal output (measured relative to SATP conditions, as applicable) from heat recovery that is used for applications other than steam generation or performance enhancement of the affected EGU in MWh.

(Pt)IE = Useful thermal output (relative to SATP conditions, as applicable) from any integrated equipment is used for applications that do not generate additional steam, electricity, produce mechanical energy output, or enhance the performance of the affected EGU in MWh.

TDF = Electric Transmission and Distribution Factor of 0.95 for a combined heat and power affected EGU where at least on an annual basis 20.0 percent of the total gross or net energy output consists of electric or direct mechanical output and 20.0 percent of the total gross or net energy output consists of useful thermal output on a 12-operating-month rolling average basis, or 1.0 for all other affected EGUs.

(ii) If applicable to your affected EGU (for example, for combined heat and power), you must calculate (Pt)PS using the following equation:

REFER TO REGULATION FOR EQUATION 3

Where:

Qm = Measured steam flow in kilograms (kg) (or pounds (lb)) for the operating hour.

H = Enthalpy of the steam at measured temperature and pressure (relative to SATP conditions or the energy in the condensate return line, as applicable) in Joules per kilogram (J/kg) (or Btu/lb).

CF = Conversion factor of 3,600,000,000 J/MWh or 3,413,000 Btu/MWh.

(6) Calculation of annual basis for standard. Sources complying with energy output-based standards must calculate the basis (i.e., denominator) of their actual annual emission rate in accordance with paragraph (a)(6)(i) of this section. Sources complying with heat input based standards must calculate the basis of their actual annual emission rate in accordance with paragraph (a)(6)(ii) of this section.

(i) In accordance with §60.5520 if you are subject to an output-based standard, you must calculate the total gross or net energy output for the affected EGU's compliance period by summing the hourly gross or net energy output values for the affected EGU that you determined under paragraph (a)(5) of this section for all of the valid operating hours in the applicable compliance period.

(ii) [N/A - EGU IS NOT SUBJECT TO HEAT INPUT-BASED STANDARD]

(7) If you are subject to an output-based standard, you must calculate the CO₂ mass emissions rate for the affected EGU(s) (kg/MWh) by dividing the total CO₂ mass emissions value calculated according to the procedures in paragraph (a)(4) of this section by the total gross or net energy output value calculated according to the procedures in paragraph (a)(6)(i) of this section. Round off the result to two significant figures if the calculated value is less than 1,000; round the result to three significant figures if the calculated value is greater than 1,000. If you are subject to a heat input-based standard, you must calculate the CO₂ mass emissions rate for the affected EGU(s) (lb/MMBtu) by dividing the total CO₂ mass emissions value calculated according to the procedures in paragraph (a)(4) of this section by the total heat input calculated according to the

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procedures in paragraph (a)(6)(ii) of this section. Round off the result to two significant figures.

(b) In accordance with §60.5520, to demonstrate compliance with the applicable CO₂ emission standard, for the initial and each subsequent 12-operating-month compliance period, the CO₂ mass emissions rate for your affected EGU must be determined according to the procedures specified in paragraph (a)(1) through (7) of this section and must be less than or equal to the applicable CO₂ emissions standard in table 1 or 2 of this part, or the emissions standard calculated in accordance with §60.5525(a)(2).

§60.5550 What notifications must I submit and when?

(a) You must prepare and submit the notifications specified in §§60.7(a)(1) and (3) and 60.19, as applicable to your affected EGU(s) (see table 3 of this subpart).

(b) You must prepare and submit notifications specified in §75.61 of this chapter, as applicable, to your affected EGUs.

§60.5555 What reports must I submit and when?

(a) You must prepare and submit reports according to paragraphs (a) through (d) of this section, as applicable.

(1) For affected EGUs that are required by §60.5525 to conduct initial and on-going compliance determinations on a 12-operating-month rolling average basis, you must submit electronic quarterly reports as follows. After you have accumulated the first 12-operating months for the affected EGU, you must submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, you must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.

(2) In each quarterly report you must include the following information, as applicable:

(i) Each rolling average CO₂ mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. You must calculate each average CO₂ mass emissions rate for the compliance period according to the procedures in §60.5540. You must report the dates (month and year) of the first and twelfth operating months in each compliance period for which you performed a CO₂ mass emissions rate calculation. If there are no compliance periods that end in the quarter, you must include a statement to that effect;

(ii) If one or more compliance periods end in the quarter, you must identify each operating month in the calendar quarter where your EGU violated the applicable CO₂ emission standard;

(iii) If one or more compliance periods end in the quarter and there are no violations for the affected EGU, you must include a statement indicating this in the report;

(iv) The percentage of valid operating hours in each 12-operating-month compliance period described in paragraph (a)(2)(i) of this section (i.e., the total number of valid operating hours (as defined in §60.5540(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent);

(v) Consistent with §60.5520, the CO₂ emissions standard (as identified in table 1 or 2 of this part) with which your affected EGU must comply; and

(vi) Consistent with §60.5520, an indication whether or not the hourly gross or net energy output (P_{gross/net}) values used in the compliance determinations are based solely upon gross electrical load.

(3) In the final quarterly report of each calendar year, you must include the following:

(i) Consistent with §60.5520, gross energy output or net energy output sold to an electric grid, as applicable to the units of your emission standard, over the four quarters of the calendar year; and

(ii) The potential electric output of the EGU.

(b) You must submit all electronic reports required under paragraph (a) of this section using the Emissions Collection and

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Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

(c)(1) For affected EGUs under this subpart that are also subject to the Acid Rain Program, you must meet all applicable reporting requirements and submit reports as required under subpart G of part 75 of this chapter.

(2) [NA - EGU IS SUBJECT TO ACID RAIN PROGRAM]

(3)(i) For all newly-constructed affected EGUs under this subpart that are also subject to the Acid Rain Program, you must begin submitting the quarterly electronic emissions reports described in paragraph (c)(1) of this section in accordance with §75.64(a) of this chapter, i.e., beginning with data recorded on and after the earlier of:

(A) The date of provisional certification, as defined in §75.20(a)(3) of this chapter; or

(B) 180 days after the date on which the EGU commences commercial operation (as defined in §72.2 of this chapter).

(ii) [N/A - EGU IS SUBJECT TO ACID RAIN PROGRAM]

(iii) [N/A - EGU IS NOT RECONSTRUCTED OR MODIFIED]

(4) If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph (c)(3) of this section, the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with §75.4(j) of this chapter, §75.37(b) of this chapter, or section 2.4 of appendix D to part 75 of this chapter (as applicable). Operating hours in which CO₂ mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in §60.5540(a)(1)), and shall not be used in the compliance determinations under §60.5540.

(d) For affected EGUs subject to the Acid Rain Program, the reports required under paragraphs (a) and (c)(1) of this section shall be submitted by:

(1) The person appointed as the Designated Representative (DR) under §72.20 of this chapter; or

(2) The person appointed as the Alternate Designated Representative (ADR) under §72.22 of this chapter; or

(3) A person (or persons) authorized by the DR or ADR under §72.26 of this chapter to make the required submissions.

(e) [N/A - EGU IS SUBJECT TO ACID RAIN PROGRAM]

(f) [N/A - EGU DOES NOT CAPTURE CO₂]

(g) [N/A - EGU DOES NOT CAPTURE CO₂]

§60.5560 What records must I maintain?

(a) You must maintain records of the information you used to demonstrate compliance with this subpart as specified in §60.7(b) and (f).

(b)(1) For affected EGUs subject to the Acid Rain Program, you must follow the applicable recordkeeping requirements and maintain records as required under subpart F of part 75 of this chapter.

(2) [N/A - EGU IS SUBJECT TO THE ACID RAIN PROGRAM]

(c) You must keep records of the calculations you performed to determine the hourly and total CO₂ mass emissions (tons) for:

(1) Each operating month (for all affected EGUs); and

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(2) Each compliance period, including, each 12-operating-month compliance period.

(d) Consistent with §60.5520, you must keep records of the applicable data recorded and calculations performed that you used to determine your affected EGU's gross or net energy output for each operating month.

(e) You must keep records of the calculations you performed to determine the percentage of valid CO₂ mass emission rates in each compliance period.

(f) You must keep records of the calculations you performed to assess compliance with each applicable CO₂ mass emissions standard in Table 1 or 2 of this subpart.

(g) You must keep records of the calculations you performed to determine any site-specific carbon-based F-factors you used in the emissions calculations (if applicable).

§60.5565 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review.

(b) You must maintain each record for 3 years after the date of conclusion of each compliance period.

(c) You must maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. You may maintain the records off site for the remaining year(s) as required by this subpart.

Other Requirements and Information

§60.5570 What parts of the general provisions apply to my affected EGU?

Notwithstanding any other provision of this chapter, certain parts of the general provisions in §§60.1 through 60.19, listed in table 3 to this subpart, do not apply to your affected EGU.

§60.5575 Who implements and enforces this subpart? [INCORPORATED BY REFERENCE]

Reporting Addresses & Regulatory Changes

Individual sources within this source group that are subject to 40 CFR Part 60 Subpart TTTT shall comply with all applicable requirements of the Subpart. 40 CFR Part 60.4 requires submission of copies of all requests, reports and other communications to both the Department and the EPA. The EPA copies shall be forwarded to:

Director
Air Protection Division (3AP00)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

The DEP copies shall be forwarded to the DEP SCRO Air Quality Program Manager at wiveaver@pa.gov, unless otherwise directed in writing by DEP.

In the event that the Federal Subpart that is the subject of this Source Group is revised, the permittee shall comply with the revised version of the subpart, and shall not be required to comply with any provisions in this permit designated as having the subpart as their authority, to the extent that such permit provisions would be inconsistent with the applicable provisions of the revised subpart.

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this permit.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

NOTE: All of the capacity/throughput values listed in Sections A and D are for informational purposes only and are not operating limits unless stated so in conditions in Section D or Section E.

This is the initial operating permit #06-05154, which supersedes plan approval #06-05154A issued 3/22/16 and plan approval #06-05154B issued 8/20/19.



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