



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: April 20, 2020 Effective Date: October 5, 2020
Revision Date: October 5, 2020 Expiration Date: April 30, 2025

Revision Type: Modification

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

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

TITLE V Permit No: 01-05029

Federal Tax Id - Plant Code: 82-5056877-1

Owner Information

Name: KESTREL ACQUISITION LLC
Mailing Address: 1731 HUNTERSTOWN RD

GETTYSBURG, PA 17325-7526

Plant Information

Plant: KESTREL ACQUISITION LLC/HUNTERSTOWN PLT

Location: 01 Adams County 01929 Straban Township

SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: MARK MCDANIELS

Title: ASSET MGR Phone: (760) 288 - 7912

Permit Contact Person

Name: THOMAS HART Title: PLANT MGR Phone: (717) 338 - 3510

[Signature] _____

WILLIAM R. WEAVER, SOUTHCENTRAL REGION AIR PROGRAMMANAGER





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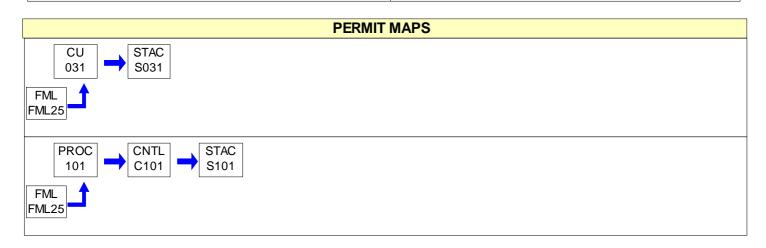
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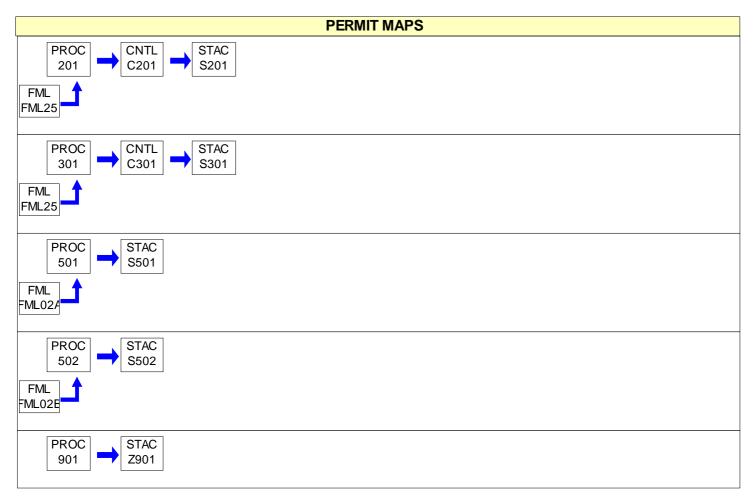
SECTION A. Site Inventory List

Source ID	Source Name	Capacity	Throughput	Fuel/Material
031	AUXILIARY BOILER	32.659	MMBTU/HR	
		32.659	MCF/HR	Natural Gas
101	COMBUSTION TURBINE 101 W/ DUCT BURNER	2,253.000	MMBTU/HR	
		2.253	MMCF/HR	Natural Gas
201 COMBU	COMBUSTION TURBINE 201 W/ DUCT BURNER	2,253.000	MMBTU/HR	
		2.253	MMCF/HR	Natural Gas
301 COM	DMBUSTION TURBINE 301 W/ DUCT BURNER	2,253.000	MMBTU/HR	
		2.253	MMCF/HR	Natural Gas
501 EMERGENCY DIESEL FIRE PUMP	EMERGENCY DIESEL FIRE PUMP	0.764	MMBTU/HR	
		5.510	Gal/HR	#2 Oil
502 EMERGENCY DIESEL-FIRED GENERATOR	EMERGENCY DIESEL-FIRED GENERATOR	0.400	MMBTU/HR	
		8.100	Gal/HR	#2 Oil
901	REMOTE RESERVOIR COLD CLEANING MACHINE(S)	1.000	Lbs/HR	VOC
C101	CT101 SCR SYSTEM			
C201	CT201 SCR SYSTEM			
C301	CT301 SCR SYSTEM			
FML02A	DIESEL FUEL OIL TANK (RE: SOURCE 501)			
FML02B	DIESEL FUEL OIL TANK (RE: SOURCE 502)			
FML25	NATURAL GAS PIPELINE			
S031	AUXILIARY BOILER STACK			
S101	CT 101 STACK			
S201	CT 201 STACK			
S301	CT 301 STACK			
S501	SOURCE 501 STACK			
S502	SOURCE 502 STACK			
Z901	SOURCE 901 FUGITIVE EMISSIONS			













KESTREL ACQUISITION LLC/HUNTERSTOWN PLT

SECTION B. General Title V Requirements

#001 [25 Pa. Code § 121.1]

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Definitions

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

#002 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

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

#003 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

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

Permit Expiration

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

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

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.







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

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

Inspection and Entry

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

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

Compliance Requirements

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
 - (1) Enforcement action
 - (2) Permit termination, revocation and reissuance or modification
 - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. 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





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).





- (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 NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.



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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,







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

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

Submissions

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

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

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

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

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

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

Sampling, Testing and Monitoring Procedures

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

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

Recordkeeping Requirements

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
 - (1) The date, place (as defined in the permit) and time of sampling or measurements.
 - (2) The dates the analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of the analyses.
 - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.



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

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

Reporting Requirements

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

#026 [25 Pa. Code § 127.513]

Compliance Certification

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

[25 Pa. Code § 127.3] #027

Operational Flexibility

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

(1) Section 127.14 (relating to exemptions)

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SECTION B. General Title V Requirements

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

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

Risk Management

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







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

#029 [25 Pa. Code § 127.512(e)]

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Approved Economic Incentives and Emission Trading Programs

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

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

Permit Shield

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

#031 [25 Pa. Code §135.3]

Reporting

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

#032 [25 Pa. Code §135.4]

Report Format

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







I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

- (a) Construction or demolition of buildings or structures.
- (b) Grading, paving and maintenance of roads and streets.
- (c) Use of roads and streets. Emissions from material in or on trucks, railroad cars, and other vehicular equipment are not considered as emissions from use of roads and streets.
- (d) Clearing of land.
- (e) Stockpiling of materials.
- (f) Open burning of clearing and grubbing wastes (trees, shrubs and other native vegetation which are cleared from land during or prior to the process of construction; does not include demolition wastes and dirt-laden roots).
- (g) Sources and classes of sources other than those identified in (a)-(f), above, for which the permittee has obtained a determination from the Department, in accordance with 25 Pa. Code §123.1(b), that fugitive emissions from the source, after appropriate control, meet the following requirements:
- (1) The emissions are of minor significance with respect to causing air pollution; and
- (2) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]

Fugitive particulate matter

The permittee shall not allow the emission of fugitive particulate matter into the outdoor atmosphere from a source specified in Section C, Condition #001(a)-(g), if the emissions are visible at the point the emissions pass outside the permittee's property.

003 [25 Pa. Code §123.31]

Limitations

The permittee shall 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

- (a) The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:
 - (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any one hour.
 - (2) Equal to or greater than 60% at any time.
- (b) The opacity provisions of part (a), above, are not applicable to Section E (Group SG01), Condition #005.

005 [25 Pa. Code §123.42]

Exceptions

The emission limitations of Section C, Condition #004, and Section E (Group SG01), Condition #005, shall not apply when:

- (a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.







(c) The emission results from sources specified in Section C, Condition #001(a)-(g).

006 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The permittee shall limit the facility's annual emissions to less than the following thresholds during any consecutive 12-month period:

- (a) 340 tons of nitrogen oxides (NOx)
- (b) 699 tons of carbon monoxide (CO)
- (c) 80 tons of volatile organic compounds (VOC)
- (d) 39 tons of sulfur dioxide (SO2)
- (e) 256 tons of particulate matter (PMPM10)
- (f) 24 tons of sulfuric acid (H2SO4)
- (g) 10 tons of any individual hazardous air pollutant (HAP)
- (h) 25 tons of aggregate HAPs

007 [25 Pa. Code §129.14]

Open burning operations

- (a) The permittee shall not allow the open burning of material on the permittee's property in a manner such 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 or property.
- (4) The emissions cause damage to vegetation or property.
- (5) The emissions are or may be deleterious to human or animal health.
- (b) The requirements of part (a), above, do not apply when the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set solely for recreational or ceremonial purposes.
- (5) A fire set solely for cooking food.
- (c) This plan approval condition does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act (SWMA), contained at 35 P.S. Section 6018.610(3), or any other provision of the SWMA.

II. TESTING REQUIREMENTS.

008 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The Department reserves the right to require exhaust stack testing of the sources referenced in this operating permit to measure emissions for purposes including verification of operating 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 source. 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.

010 [25 Pa. Code §139.11]

General requirements.

- (a) As specified in 25 Pa. Code §139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.
- (b) As specified in 25 Pa. Code §139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, at a minimum, all of the following:
- (1) A thorough source description, including a description of any air cleaning devices and the flue.
- (2) Process conditions, for example, the fuel firing rate, SCR ammonia addition, and other conditions which may affect emissions from the process.
- (3) The location of the sampling ports.
- (4) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO2, O2, and N2), static and barometric pressures.
- (5) Sample collection techniques employed, including procedures used, equipment descriptions, and data to verify that isokinetic sampling occurred and that acceptable test conditions were met.
- (6) Laboratory procedures and results.
- (7) Calculated results.

MONITORING REQUIREMENTS. III.

011 [25 Pa. Code §123.43]

Measuring techniques

The permittee shall measure visible emissions (referenced in Section C, Conditions #004, #005, and #012, and Section E (Group SG01), Condition #005) using either of the following:

- (a) A device approved by the Department and maintained to provide accurate opacity measurements (e.g., Continuous Opacity Monitor).
- (b) Observers trained and certified in EPA Reference Method 9 to measure plume opacity with the naked eye; or with the aid of any device(s) approved by the Department.

012 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall conduct a weekly inspection around the plant periphery during daylight hours when the plant is in operation (power production) to detect visible emissions, fugitive particulate matter emissions, and malodorous air contaminants. In the event that none of the applicable units operate during a given week, the permittee is not required to conduct an inspection during that week. 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, plant personnel who observe visible emissions may report the incidence of visible emissions 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 particulate matter emissions beyond the plant property boundaries, as stated in Section C, Condition #002.
- (c) The presence of malodorous air contaminants beyond the plant property boundaries, as stated in Section C, Condition #003.

IV. RECORDKEEPING REQUIREMENTS.

013 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

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

- (a) The name of the company representative monitoring each inspection.
- (b) The date and time of each inspection.
- (c) The wind direction during each inspection.
- (d) A description of the visible emissions, fugitive particulate matter emissions (beyond the plant property boundaries), and malodorous air contaminants (beyond the plant property boundaries) observed, if any, and actions taken to mitigate them. If no visible emissions or fugitive particulate matter emissions or malodors are observed, then document that none were observed.

014 [25 Pa. Code §135.5]

Recordkeeping

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The permittee shall, at a minimum, maintain the following records for the facility:

- (a) Monthly fuel consumption. In addition, the monthly fuel consumption shall be included in the annual air emissions report referenced in Section B, Conditions #031 and #032.
- (b) Fuel consumption during each consecutive 12-month period.
- (c) Monthly emissions of PM, PM10, SO2, NOx, CO, VOC, and H2SO4. For the combined cycle turbines: NOx and CO will be measured by CEM, SO2 will be calculated based on fuel consumption and fuel sulfur content in accordance with 40 CFR Part 75 requirements, and PM, PM10, VOC, and H2SO4 will be based on fuel consumption and emission factors determined during compliance stack testing. Start-up, shutdown, combustion turbine run back, and start-up trip emissions will be calculated based on the recorded number and duration of these events using available CEM data or emission rates provided in the plan approval application. In addition, the monthly air emissions and calculations shall be included in the annual air emissions report referenced in Section B, Conditions #031 and #032.
- (d) Cumulative emissions of PM, PM10, SO2, NOx, CO, VOC, H2SO4, individual HAPs, and aggregate HAPs during each consecutive 12-month period in order to demonstrate compliance with Condition #006, above.
- (e) Results of fuel sampling, as applicable.
- (f) The measured SCR parameters: (1) catalyst inlet temperature, and (2) ammonia solution injection rate.
- (g) Monthly and annual days and hours of operations of all three turbines.



(h) Emission factors used for air emission calculations.

015 [25 Pa. Code §135.5]

Recordkeeping

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[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

Records required by this operating permit shall be kept for a minimum period of five (5) years and shall be made available to the Department upon its request.

V. REPORTING REQUIREMENTS.

016 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall report each malfunction that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizen complaints to the Department that occurs at this Title V facility. For purposes of this operating permit condition, a malfunction is defined as 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(s) of air contaminants.

The initial notification shall be made to the Department by telephone no later than two (2) hours after the incident. A followup written notice shall be submitted to the Department within three (3) business days.

- (a) The notices shall describe the following:
- (1) Name and location of the facility;
- (2) Nature and cause of the malfunction;
- (3) Time when the malfunction was first observed;
- (4) Expected duration of excess emissions, and;
- (5) Estimated rate of emissions.
- (b) The permittee shall notify the Department immediately when corrective measures have been accomplished.
- (c) Subsequent to the malfunction, the permittee shall submit a full report on the malfunction to the Department within 15 days, if requested.
- (d) The permittee shall submit reports on the operation and maintenance of the source(s) to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, fuel usage, firing rates, hours of operation, and maintenance schedules.
- (e) Notices and reports under this condition shall be submitted to the Department at the following address:

PA DEP

Southcentral Regional Office Air Quality Program 909 Elmerton Avenue Harrisburg, PA 17110-8200

Telephone reports shall be made to the Department's Air Quality Program at 717.705.4702 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

017 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

Pursuant to Section C, Category VIII. COMPLIANCE CERTIFICATION below, the permittee shall forward the annual



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compliance certification report to U.S. EPA electronically, in lieu of a hard copy version, to the following email address: 'R3_APD_Permits@epa.gov'.

VI. WORK PRACTICE REQUIREMENTS.

018 [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)-(g). These actions shall include, but not be limited to, the following:

- (a) 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.
- (b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) Paving and maintenance of roadways.
- (d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

[25 Pa. Code §127.512]

Operating permit terms and conditions.

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 and air pollution control practices that minimize air emissions.

VII. ADDITIONAL REQUIREMENTS.

020 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The following table summarizes the potential emissions from maximum operation of the combined cycle portion of the electric generating facility according to the original plan approval application submittal and the Department's own analysis:

Pollutant	Emission Rate*
Nitrogen Oxides	340
Carbon Monoxide	699
Volatile Organic Compounds	80
Sulfur Dioxide	39
Particulate Matter (PM/PM10)	256
Sulfuric Acid Mist	24

^{*} tons during any consecutive 12-month period

These emissions consumed the following portion of the available Prevention of Significant Deterioration (PSD) air quality increments:

Pollutant Ambient Air Quality Impact (ug/m3)

Nitrogen Oxides Annual Average = 0.3 Sulfur Dioxide 3-Hour Average = 2.2 Sulfur Dioxide 24-Hour Average = 0.6 Sulfur Dioxide Annual Average = 0.03 Particulate Matter (PM10) 24-Hour Average = 4.4 Particulate Matter (PM10) Annual Average = 0.2







VIII. COMPLIANCE CERTIFICATION.

The permittee shall submit within thirty days of 01/01/2021 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 ***



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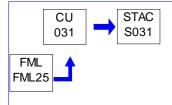
SECTION D. Source Level Requirements

Source ID: 031 Source Name: AUXILIARY BOILER

Source Capacity/Throughput: 32.659 MMBTU/HR

32.659 MCF/HR Natural Gas

Conditions for this source occur in the following groups: SG04



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.11]

Combustion units

The permittee shall not allow the emission of particulate matter into the outdoor atmosphere from the Source ID 031 boiler in excess of 0.4 pound per million BTU of heat input.

002 [25 Pa. Code §123.22]

Combustion units

The permittee shall not allow the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from the Source ID 031 boiler in excess of four (4) pounds per million BTU of heat input over any one (1) hour period.

[Compliance with the requirement(s) specified in this streamlined permit condition assures compliance with the SIP-approved sulfur dioxide emission limit specified in 40 CFR 52.2020(c)(1)]

Fuel Restriction(s).

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall operate the Source ID 031 boiler using natural gas fuel only.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

- (a) Pursuant to 25 Pa. Code §§129.97(b)(3) and 129.100(d), the permittee shall maintain records that include sufficient data in order to demonstrate the Source ID 031 boiler's compliance with the presumptive NOx and VOC RACT requirements of 25 Pa. Code §129.97(b)(1) that are outlined in Condition #005, below.
- (b) Pursuant to 25 Pa. Code §129.100(g), the permittee shall record each adjustment conducted under the procedures in 25 Pa. Code §129.97(b). This record must contain, at a minimum:



- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NOx and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.
- (c) Pursuant to 25 Pa. Code §129.100(i), 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.

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.

005 [25 Pa. Code §129.97]

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

Pursuant to 25 Pa. Code §129.97(b)(1), the permittee shall perform a biennial tune-up of the Source ID 031 boiler conducted in accordance with the procedures in 40 CFR §63.11223 (relating to how do I demonstrate continuous compliance with the work practice and management practice standards), defined below. The biennial tune-up must include, at a minimum, the following:

- (a) Inspection and cleaning or replacement of fuel-burning equipment, including the burners and components, as necessary, for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern and adjustment of the burner, as necessary, to optimize the flame pattern to minimize total emissions of NOx and, to the extent possible, emissions of CO.
- (c) Inspection and adjustment, as necessary, of the air-to-fuel ratio control system to ensure proper calibration and operation as specified by the manufacturer.
- 40 CFR §63.11223 (relating to how do I demonstrate continuous compliance with the work practice and management practice standards), referenced above, states the following:
- (a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b), below, and keep records as required in 40 CFR §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
- (b) Except as specified in paragraphs (c) through (f), below, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7), below. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.
- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the



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

- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
- (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide (NOx) requirement to which the unit is subject.
- (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii), below.
- (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
- (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
- (c) [N/A THE BOILER DOES NOT EMPLOY AN OXYGEN TRIM SYSTEM]
- (d) [N/A THE BOILER IS NOT DEFINED AS A "SEASONAL BOILER"]
- (e) [N/A THE BOILER FIRES NATURAL GAS FUEL ONLY]
- (f) [N/A THE BOILER IS NOT DEFINED AS A "LIMITED-USE BOILER"]
- (g) [N/A THE BOILER IS NOT SUBJECT TO ANY MACT SUBPART JJJJJJ TABLE 1 EMISSION LIMIT]

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***





01-05029

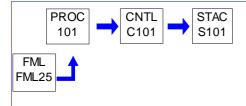
Source ID: 101 Source Name: COMBUSTION TURBINE 101 W/ DUCT BURNER

> Source Capacity/Throughput: 2,253.000 MMBTU/HR

> > 2.253 MMCF/HR Natural Gas

Conditions for this source occur in the following groups: SG01

> **SG05 SG06 SG07 SG08 SG11 SG12**



RESTRICTIONS.

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

TESTING REQUIREMENTS.

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

MONITORING REQUIREMENTS. III.

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

RECORDKEEPING REQUIREMENTS. IV.

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

REPORTING REQUIREMENTS.

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

WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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





*** Permit Shield in Effect. ***





01-05029



SECTION D. **Source Level Requirements**

Source ID: 201 Source Name: COMBUSTION TURBINE 201 W/ DUCT BURNER

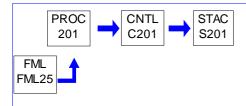
> Source Capacity/Throughput: 2,253.000 MMBTU/HR

> > 2.253 MMCF/HR Natural Gas

Conditions for this source occur in the following groups: SG01

> **SG05 SG06 SG07 SG08 SG11**

SG12



RESTRICTIONS.

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

TESTING REQUIREMENTS.

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

MONITORING REQUIREMENTS. III.

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

RECORDKEEPING REQUIREMENTS. IV.

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

REPORTING REQUIREMENTS.

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

WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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





*** Permit Shield in Effect. ***





01-05029

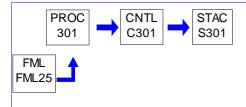
Source ID: 301 Source Name: COMBUSTION TURBINE 301 W/ DUCT BURNER

> Source Capacity/Throughput: 2,253.000 MMBTU/HR

> > 2.253 MMCF/HR Natural Gas

Conditions for this source occur in the following groups: SG01

> **SG05 SG06 SG07 SG08 SG11 SG12**



RESTRICTIONS.

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

TESTING REQUIREMENTS.

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

MONITORING REQUIREMENTS. III.

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

RECORDKEEPING REQUIREMENTS. IV.

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

REPORTING REQUIREMENTS.

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

WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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





*** Permit Shield in Effect. ***



01-05029



SECTION D. Source Level Requirements

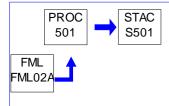
Source ID: 501 Source Name: EMERGENCY DIESEL FIRE PUMP

Source Capacity/Throughput: 0.764 MMBTU/HR

5.510 Gal/HR #2 Oil

Conditions for this source occur in the following groups: SG02

SG09



I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***







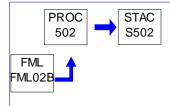
Source ID: 502 Source Name: EMERGENCY DIESEL-FIRED GENERATOR

> Source Capacity/Throughput: 0.400 MMBTU/HR

> > 8.100 Gal/HR #2 Oil

Conditions for this source occur in the following groups: SG02

SG09



01-05029

RESTRICTIONS. L

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

TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

RECORDKEEPING REQUIREMENTS. IV.

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

REPORTING REQUIREMENTS.

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

WORK PRACTICE REQUIREMENTS. VI.

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

ADDITIONAL REQUIREMENTS. VII.

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

*** Permit Shield in Effect. ***





Source ID: 901 Source Name: REMOTE RESERVOIR COLD CLEANING MACHINE(S)

> Source Capacity/Throughput: 1.000 Lbs/HR VOC

PROC STAC Z901 901

RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §129.63]

Degreasing operations

- (a) The permittee may not use in each Source ID 901 machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.
- (b) This operating permit condition does not apply:
- (1) If any Source ID 901 machine is used in extreme cleaning service. Extreme cleaning service is defined as the use of a cold cleaning machine to clean parts used in the manufacture of the following gases or to clean parts exposed to these gases in manufacturing, production, research and development, analytical work, or other similar operations:
 - (A) Oxygen in concentrations greater than 23%
 - (B) Ozone
 - (C) Nitrous oxide
 - (D) Fluorine
 - (E) Chlorine
 - (F) Bromine
 - (G) Halogenated compounds
- (2) If the permittee demonstrates, and the Department approves in writing, that compliance with this operating permit condition will result in unsafe operating conditions.

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).

RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §129.63]

Degreasing operations

The permittee shall maintain the following records for each Source ID 901 machine:

- (a) The name and address of the solvent supplier.
- (b) The type of solvent including the product or vendor identification number.
- (c) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

An invoice, bill of sale, certificate that corresponds to a number of sales, Safety Data Sheet (SDS), or other appropriate documentation acceptable to the Department may be used to comply with this operating permit condition.







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).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §129.63]

Degreasing operations

Each Source ID 901 machine shall be equipped with one of the following:

- (a) A cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.
- (b) A perforated drain with a diameter of not more than six (6) inches, if the Source ID 901 machine drains directly into the solvent storage reservoir.

004 [25 Pa. Code §129.63]

Degreasing operations

Each Source ID 901 machine shall have a permanent, conspicuous label summarizing the operating requirements in Condition #005, below. In addition, the label shall include the following discretionary good operating practices:

- (a) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to each cold cleaning machine.
- (b) When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned.
- (c) Work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.

005 [25 Pa. Code §129.63]

Degreasing operations

The permittee shall operate each Source ID 901 machine in accordance with the following procedures:

- (a) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.
- (b) Flushing of parts using a flexible hose or other flushing device shall be performed only within each Source ID 901 machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray.
- (c) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in each Source ID 901 machine.
- (d) Air-agitated solvent baths may not be used.
- (e) Spills during solvent transfer and use of each Source ID 901 machine shall be cleaned up immediately.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §129.63]

Degreasing operations

All of the aforementioned operating permit conditions apply to any Source ID 901 machine using 2 gallons or more of





solvents containing greater than 5% VOC content by weight for the cleaning of metal parts.

*** Permit Shield in Effect. ***







Group Name: SG01

Group Description: COMBINED CYCLE COMBUSTION TURBINES

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.1]

Purpose.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the emission of ammonia from each Group SG01 combustion turbine's SCR to 10 ppmv (measured by dry volume and corrected to 15% oxygen under Part-Load Utilization as defined in Condition #004, below).

002 [25 Pa. Code §127.205]

Special permit requirements.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029C]

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205 for NOx and VOC, and the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83 for CO, the permittee shall limit the emissions from each Group SG01 combustion turbine, during hours that include startup or shutdown (S/S) emissions, to the following:

		Emissions	s Per Unit	(lbs/hr)*
S/S Condition	Duration per event (hrs)	NOx	CO	VOC
Cold Startup	5.5	380	5,419	51
Warm Startup	3.5	345	3,776	15
Hot Startup	2.5	205	2,476	12
Shutdown	0.5	31	1,495	17

^{*} Calculated as a 1-hour block average. Hourly block averages will be considered valid if the hour contains at least 75% valid data readings.

003 [25 Pa. Code §127.205]

Special permit requirements.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the emissions from each Group SG01 combustion turbine to the following:

(a) NOx

- (1) with duct burner = 3.5 ppmvd @ 15% O2 (1-hour block average)
- (2) without duct burner = 3.5 ppmvd @ 15% O2 (1-hour block average)

(b) VOC (measured in terms of CH4)

- (1) with duct burner = 3.5 ppmvd @ 15% O2
- (2) without duct burner = 1.4 ppmvd @ 15% O2

[Compliance with the NOx requirements specified in this streamlined permit condition assures compliance with 40 CFR §§60.44Da(d)(1) and 60.332(a)(1)]



004 [25 Pa. Code §127.512]

01-05029

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The emission levels in Conditions #001 and #003, above, and #006, below, apply at all times except during periods of startup, combustion turbine run back and shutdown (when the combustion turbine load is less than 44%) as defined as follows:

- (a) Cold Startup: refers to a restart made more than 72 hours after shutdown; cold startup periods shall not exceed 5.5 hours per occurrence.
- (b) Warm Startup: refers to a restart made 8 hours or more, but less than or equal to 72 hours, after shutdown; warm startup periods shall not exceed 3.5 hours per occurrence.
- (c) Hot Startup: refers to restarts made less than 8 hours after shutdown; hot startup periods shall not exceed 2.5 hours per occurrence.
- (d) Shutdown: commences with the initiation of a fired shutdown command, trip of combustion turbine command, or at loads below 44%.
- (e) Part-Load Utilization: refers to steady-state combustion turbine operation at loads of 44% up to 100% of full capacity.
- (f) Combustion turbine run back: refers to operations of any combustion turbine at or above Part-Load Utilization when a process critical alarm causes a combustion turbine to drop load below Part-Load Utilization prior to a fired shutdown command being initiated.
- (g) During combustion turbine run back, the following conditions apply:
- (1) At the start of a combustion turbine run back, the permittee shall be granted 90 minutes to either return to at or above 44% load or initiate shutdown procedures.
- (2) CEMS data records for NOx and CO will use the process codes for startup or shutdown during a combustion turbine run back occurrence. The period of time during the combustion turbine run back will be recorded as malfunction time in accordance with Condition #011, below, (recordkeeping requirements) including those in 40 CFR §60.7(b).
- (h) Startup trip: refers to a startup malfunction which causes the combustion turbine to prematurely cease startup and commence shutdown. The period of startup prior to occurrence of a startup trip shall not be counted when determining whether the subsequent startup complies with the time limits for startups stated in parts (a), (b), and (c), above. The period of time prior to the startup trip will be recorded as malfunction time in accordance with Condition #011, below, (recordkeeping requirements) including those in 40 CFR §60.7(b).
- (i)(1) If the permittee wishes to establish a "minimum turndown" definition that would replace, and be less than, the 44% load value of the first paragraph, above, as well as parts (d), (e), and (g)(1), above, then the permittee shall conduct the emissions testing described in part (i)(3), below, at the lower load in order to demonstrate compliance with the emission levels in Conditions #001 and #003, above, and #006, below. Emission and duration limits in Condition #002, above, do not apply during Department-approved "minimum turndown" test programs. The permittee shall contact the Department to determine at what load the specific Group SG01 combustion turbine(s) shall be tested. "Minimum turndown" is defined as the minimum steady-state operational load established during Department-approved emissions testing that a Group SG01 combustion turbine(s) can operate in compliance with the emission levels in Conditions #001 and #003, above, and #006, below.
- (2) The permittee may establish a "minimum turndown" definition outlined in (i)(1), above, upon successful demonstration of compliance with the emission levels in Conditions #001 and #003, above, and #006, below, and upon Department approval by following the procedures of Condition #009, below.
- (3) The permittee shall conduct three (3) runs of the following emissions tests of the Group SG01 combustion turbine(s)







pursuant to 25 Pa. Code Chapter 139 of the rules and regulations of the Department in order to demonstrate compliance with the emission levels in Conditions #001 and #003, above, and #006, below:

- (i) EPA Reference Method 207 or another Method approved by the Department ammonia emissions; report ammonia emissions in units of ppmvd (corrected to 15% oxygen under Part-Load Utilization as defined in part (e), above).
- (ii) EPA Reference Method 18, 25, or another Method approved by the Department VOC emissions; report VOC emissions in units of ppmvd (corrected to 15% oxygen); VOC emissions shall be reported in terms of methane.
- (iii) EPA Reference Method 6A, 6B, 6C, 8, or another Method approved by the Department SOx emissions; report SOx emissions in units of lb/mmBTU (higher heating value [HHV]); SOx emissions shall be reported in terms of sulfur dioxide (SO2). Demonstration of fuel sulfur content in fuel shall be an acceptable alternative.
- (iv) EPA Reference Method 8 or another Method approved by the Department H2SO4 mist emissions; report H2SO4 mist emissions in units of lb/mmBTU (HHV). Demonstration of fuel sulfur content in fuel shall be an acceptable alternative.

005 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029C]

- (a) Except during periods of startup, shutdown and combustion turbine runback, the permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants from any of the Group SG01 combustion turbines in such a manner that the opacity of the emission is either of the following:
- (1) Equal to or greater than 10% for a period or periods aggregating more than three minutes in any one hour.
- (2) Equal to or greater than 30% at any time.
- (b) During periods of startup, shutdown and combustion turbine run back, the permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants from any of the Group SG01 combustion turbines in such a manner that the opacity of the emission is either of the following:
- (1) Equal to or greater than 15% for a period or periods aggregating more than three minutes in any one hour.
- (2) Equal to or greater than 30% at any time.

[Compliance with the opacity requirements specified in this streamlined permit condition assures compliance with 25 Pa. Code §123.41]

006 [25 Pa. Code §127.83]

Adoption of program.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the emissions from each Group SG01 combustion turbine to the following:

- (a) CO
 - (1) with duct burner = 14.0 ppmvd @ 15% O2 (1-hour block average)
 - (2) without duct burner = 10.0 ppmvd @ 15% O2 (1-hour block average)
- (b) SO2
 - (1) with duct burner = 0.0015 pounds per million BTU (HHV)
 - (2) without duct burner = 0.0015 pounds per million BTU (HHV)
- (c) PM/PM10
 - (1) with duct burner = 0.0106 pounds per million BTU (HHV)
 - (2) without duct burner = 0.0098 pounds per million BTU (HHV)







- (d) H2SO4 Mist
 - (1) with duct burner = 0.0009 pounds per million BTU (HHV)
 - (2) without duct burner = 0.0009 pounds per million BTU (HHV)

[Compliance with the PM and SO2 requirements specified in this streamlined permit condition assures compliance with 40 CFR §60.42Da(a) and 40 CFR §60.43Da(b)(2), respectively]

Fuel Restriction(s).

007 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall operate each Group SG01 combustion turbine and associated duct burner using natural gas fuel only.

Throughput Restriction(s).

008 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The Permittee shall limit the total amount of natural gas combusted in the Group SG01 combustion turbines' duct burners to 3,126 million cubic feet, or less, during any consecutive 12-month period.

II. TESTING REQUIREMENTS.

009 [25 Pa. Code §127.512]

Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code §139.3, at least 90 calendar days prior to commencing an emissions testing program, unless otherwise approved in writing by the Department, the permittee shall submit a test protocol to the Department for review and approval. Unless otherwise approved in writing by the Department, the permittee shall not conduct the emissions test that is the subject of the test protocol, until the test protocol has been approved by the Department. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code §139.3, at least 15 calendar days prior to commencing an emissions testing program, the permittee shall notify the Southcentral Regional Office and the Bureau of Air Quality's Division of Source Testing and Monitoring of the date and time of the emissions test. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 25 Pa. Code §139.53(a)(3), within 15 calendar days after completion of the on-site testing portion of an emissions test program, if a complete test report has not yet been submitted, the permittee shall send an electronic mail notification to the Southcentral Regional Office and the Bureau of Air Quality's Division of Source Testing and Monitoring indicating the completion date of the on-site testing.
- (d) Pursuant to 25 Pa. Code §139.3, the permittee shall submit copies of the complete test report to the Department no later than 60 calendar days after completion of the on-site testing portion of an emissions test program.
- (e) Pursuant to 25 Pa. Code §139.53(b), a complete test report shall include a summary of the emissions 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 operating permit conditions. The summary results will include, at a minimum, the following information:
- (1) A statement that the permittee has reviewed the report from the emissions testing body and agrees with the findings.
- (2) Operating permit number(s) and condition(s) which are the basis for the evaluation.
- (3) Summary of results with respect to each applicable operating permit condition.
- (4) Statement of compliance or non-compliance with each applicable operating permit condition.
- (f) Pursuant to 25 Pa. Code §139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.



01-05029



SECTION E. Source Group Restrictions.

- (g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department.
- (h) Pursuant to 25 Pa. Code §§139.53(a)(1) and 139.53(a)(3), all submittals, besides notifications, shall be accomplished via PSIMS*Online available via https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If Internet submittal cannot be accomplished, one paper copy and one digital copy of each submittal shall be made to each of the following:

Southcentral Regional Office:

Paper copy: Program Manager, Air Quality Program, PA DEP Southcentral Regional Office, 909 Elmerton Avenue,

Harrisburg, PA 17110-8200

Digital copy: RA-epscstacktesting@pa.gov

Bureau of Air Quality:

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 any applicable federal subpart are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting state and federal requirements, the most stringent provision, term, condition, method or rule shall be used by default.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The permittee shall measure and record the following parameters continuously during operation of each Group SG01 combustion turbine's SCR system:

- (a) Catalyst bed inlet gas temperature.
- (b) Ammonia solution injection rate.

IV. RECORDKEEPING REQUIREMENTS.

011 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029C]

The permittee shall record the duration of each startup, shutdown, combustion turbine run back, and startup trip event, including the date and times of each event. Air emissions of the non-monitored pollutants listed in Conditions #003 and #006, above, during these events shall be calculated based upon the emission rates presented in the plan approval application (re: P.A. Nos. 01-05029 & 01-05029C). The emissions of CO and NOx during these events will be determined from the Continuous Emissions Monitoring Systems (CEMSs). All of these emissions shall be included in the monthly and consecutive 12-month air emissions reports specified in Section C, Condition #014(c)&(d).

012 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall maintain records of each Group SG01 combustion turbine's duct burner's monthly natural gas combustion and monthly operating hours.
- (b) Monthly natural gas combustion shall be determined by daily monitoring and recordkeeping of each combustion turbine's duct burner natural gas combustion.
- (c) The permittee shall maintain records of each Group SG01 combustion turbine's duct burner's cumulative natural gas combustion. This is necessary to demonstrate compliance with Condition #008, above.
- (d) 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.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

013 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

To minimize visible emissions from the Group SG01 combustion turbines during periods of startup and shutdown as defined in Condition #004, above, the permittee shall commence the ammonia flow for the SCR system as soon as the SCR evaporator and catalyst bed temperatures reach the minimum operating temperatures as recommended by the SCR manufacturer.

VII. ADDITIONAL REQUIREMENTS.

014 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The Department reserves the right to use the continuous emissions monitoring system (CEMS) data, stack test results, and the operating parameters determined during optimization of each Group SG01 combustion turbine and their associated SCR for the following:

- (a) Verify emission rates
- (b) Establish emission factors
- (c) Develop compliance assurance measures in the Title V operating permit.

015 [25 Pa. Code §127.512]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from Plan Approval Nos. 01-05029 and 01-05029C]

The Group SG01 combustion turbine/HRSG units are subject to the Title IV 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

*** Permit Shield in Effect. ***







Group Name: SG02

Group Description: INTERNAL COMBUSTION ENGINES

Sources included in this group

ID	Name
501	EMERGENCY DIESEL FIRE PUMP
502	EMERGENCY DIESEL-FIRED GENERATOR

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

The permittee shall not allow the emission into the outdoor atmosphere of particulate matter (PM) from any Group SG02 engine in a manner that the concentration of PM in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]

General

The permittee shall not allow the emission into the outdoor atmosphere of sulfur oxides from any Group SG02 engine in a manner that the concentration of the sulfur oxides (expressed as SO2) in the effluent gas exceeds 500 parts per million, by volume, dry basis.

Fuel Restriction(s).

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall operate each Group SG02 engine using diesel/No. 2 fuel oil only.

Operation Hours Restriction(s).

004 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall limit the total operating time of each Group SG02 engine to less than 500 hours 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.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for parts (d) & (e) of this permit condition is also derived from 25 Pa. Code §129.100(d)&(i), respectively]

- (a) The permittee shall maintain records of each Group SG02 engine's monthly hours of operation.
- (b) The permittee shall maintain records of each Group SG02 engine's cumulative hours of operation for each consecutive 12-month period. This is necessary to demonstrate compliance with Condition #004, above.
- (c) The permittee shall maintain records of the fuel supplier's certification or laboratory analysis for each diesel/No. 2 fuel oil delivery received.







- (d) The permittee shall maintain records of all maintenance activities to verify that each Group SG02 engine has been operated and maintained in accordance with the manufacturer's specifications.
- (e) 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.

006 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

- (a) Pursuant to 25 Pa. Code §129.100(d), the permittee shall maintain a copy of each Group SG02 engine manufacturer's specifications.
- (b) Pursuant to 25 Pa. Code §129.100(i), 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.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

007 [25 Pa. Code §129.97]

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

Pursuant to 25 Pa. Code §129.97(c)(8), the permittee shall operate and maintain each Group SG02 engine in accordance with the manufacturer's specifications and with good operating practices for the control of NOx & VOC emissions.

[Compliance with this streamlined operating permit condition assures compliance with the presumptive RACT emission limit specified in 25 Pa. Code §129.93(c)(5)]

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***







Group Name: SG04

Group Description: SOURCE SUBJECT TO NSPS SUBPART Do

Sources included in this group

ID Name

031 AUXILIARY BOILER

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.

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.

- (a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR §60.7. This notification shall include:
- (1) The design heat input capacity of the affected facility and identification of fuel(s) to be combusted in the affected facility.
- (2) [N/A THERE IS NO FEDERALLY ENFORCEABLE REQUIREMENT LIMITING THE BOILER'S ANNUAL CAPACITY FACTOR FOR ANY FUEL(S) OR FUEL MIXTURES UNDER 40 CFR §§60.42c OR 60.43c]
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) [N/A THE BOILER DOES NOT EMPLOY AN EMERGING TECHNOLOGY FOR SO2 EMISSIONS CONTROL]

[NOTIFICATION OF THE DATE OF CONSTRUCTION AND ACTUAL STARTUP, AS PROVIDED BY 40 CFR §60.7, WAS SUBMITTED TO BOTH U.S. EPA AND THE DEPARTMENT VIA A LETTER DATED 5/22/03]

- (b) [N/A THE BOILER FIRES NATURAL GAS FUEL ONLY; THEREFORE, THERE ARE NO APPLICABLE 40 CFR §60..42c SO2 EMISSION LIMITS OR 40 CFR §60.43c PM EMISSION OR OPACITY LIMITS; ALSO, THE BOILER DOES NOT EMPLOY CEMS AND/OR COMS]
- (c) $[N/A THE BOILER FIRES NATURAL GAS FUEL ONLY; THEREFORE, THERE ARE NO APPLICABLE 40 CFR <math>\S 60.43c$ OPACITY LIMITS]
- (d) [N/A THE BOILER FIRES NATURAL GAS FUEL ONLY; THEREFORE, THERE ARE NO APPLICABLE 40 CFR §60.42c SO2 EMISSION LIMITS, FUEL OIL SULFUR LIMITS, OR SO2 PERCENT REDUCTION REQUIREMENTS]
- (e) [N/A THE BOILER FIRES NATURAL GAS FUEL ONLY; THEREFORE, THERE ARE NO APPLICABLE 40 CFR §60.42c







SO2 EMISSION LIMITS, FUEL OIL SULFUR LIMITS, OR SO2 PERCENT REDUCTION REQUIREMENTS]

- (f) [N/A THE BOILER FIRES NATURAL GAS FUEL ONLY; THEREFORE, THERE ARE NO APPLICABLE 40 CFR §60.42c FUEL OIL SULFUR LIMITS]
- (g)(1) Except as provided under 40 CFR §60.48c(g)(2) and (g)(3), below, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
- (2) As an alternative to meeting the requirements of 40 CFR §60.48c(g)(1), above, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR §60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- (3) As an alternative to meeting the requirements of 40 CFR §60.48c(g)(1), above, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR Part 60, Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR §60.42c to use fuel certification to demonstrate compliance with the SO2 standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- (h) [N/A THE BOILER HAS NO FEDERALLY ENFORCEABLE REQUIREMENT LIMITING THE ANNUAL CAPACITY FACTOR FOR ANY FUEL(S) OR FUEL MIXTURES UNDER 40 CFR §§60.42c OR 60.43c]
- (i) All records required under this operating permit condition [i.e., 40 CFR §60.48c] shall be maintained by the owner or operator of the affected facility for a period of two (2) years following the date of such record.
- (j) The reporting period for the reports required under 40 CFR Part 60, Subpart Dc, is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [i.e., THE REPORT FOR JANUARY 1 THROUGH JUNE 30 SHALL BE POSTMARKED BY JULY 30; THE REPORT FOR JULY 1 THROUGH DECEMBER 31 SHALL BE POSTMARKED BY JANUARY 30]

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

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 §127.512]

Operating permit terms and conditions.

In the event that 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS Subpart Dc) is revised, the permittee shall comply with the revised version of NSPS Subpart Dc, and shall not be required to comply with any provisions in this operating permit designated as having NSPS Subpart Dc as their authority, to the extent that such operating permit provisions would be inconsistent with the applicable provisions of the revised NSPS Subpart Dc.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029]

The Group SG04 boiler is subject to 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable standards, compliance provisions, performance test, monitoring, record keeping, and reporting requirements contained at 40 CFR §§60.40c through 60.48c, including all applicable portions of 40 CFR Part 60, Subpart A - General Provisions. The permittee shall comply with 40 CFR §60.4, which requires submission of copies of all requests, reports, applications, submittals, and other





SECTION E.

01-05029

Source Group Restrictions.

communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. 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 Department copies shall be forwarded to:

Regional Air Program Manager PA Department of Environmental Protection 909 Elmerton Avenue Harrisburg, PA 17110-8200

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c] Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Applicability and delegation of authority.

- (a) Except as provided in 40 CFR §60.40c(d), (e), (f), and (g), below, the affected facility to which 40 CFR Part 60, Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBTU/hr)) or less, but greater than or equal to 2.9 MW (10 mmBTU/hr).
- (b) In delegating implementation and enforcement authority to a State under Section 111(c) of the Clean Air Act, 40 CFR §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.
- (c) Steam generating units that meet the applicability requirements in 40 CFR §60.40c(a), above, are not subject to the sulfur dioxide (SO2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this 40 CFR Part 60, Subpart Dc (40 CFR §§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in 40 CFR §60.41c.
- (d) [N/A THE BOILER IS NOT AN EXISTING STEAM GENERATING UNIT]
- (e) Affected facilities (i.e., heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of 40 CFR Part 60, Subpart KKKK, are not subject to 40 CFR Part 60, Subpart Dc. 40 CFR Part 60, Subpart Dc, will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 mmBTU/hr) heat input of fossil fuel but less than or equal to 29 MW (100 mmBTU/hr) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to 40 CFR Part 60, Subpart Dc, only emissions resulting from combustion of fuels in the steam generating unit are subject to 40 CFR Part 60, Subpart Dc. The stationary combustion turbine emissions are subject to 40 CFR Part 60, Subpart GG or KKKK, as applicable.
- (f) [N/A THE BOILER IS NOT SUBJECT TO EITHER 40 CFR PART 60, SUBPART AAAA OR CCCC]
- (g) [N/A THE BOILER IS NOT SUBJECT TO 40 CFR PART 60, SUBPART BBBB]
- (h) [N/A THE BOILER IS NOT SUBJECT TO EITHER 40 CFR PART 60, SUBPART J OR Ja]
- (i) [N/A THE BOILER IS NOT A TEMPORARY STEAM GENERATING UNIT AS DEFINED IN 40 CFR §60.41c]

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41c] Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Definitions.

Terms used in 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as well as Section E, Group SG04, are defined in the Clean Air Act; in 40 CFR §60.2 (General Provisions);



and in 40 CFR §60.41c.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

*** Permit Shield in Effect. ***



01-05029



SECTION E. Source Group Restrictions.

Group Name: SG05

Group Description: SOURCES SUBJECT TO NSPS SUBPART GG

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.332]

Subpart GG - Standards of Performance for Stationary Gas Turbines Standard for nitrogen oxides.

- (a) On and after the date on which the performance test required by 40 CFR §60.8 is completed, every owner or operator subject to the provisions of 40 CFR Part 60, Subpart GG, as specified in 40 CFR §60.332(b), (c), and (d), below, shall comply with one of the following, except as provided in 40 CFR §60.332(e), (f), (g), (h), (i), (j), (k), and (l), below.
- (1) No owner or operator subject to the provisions of 40 CFR Part 60, Subpart GG, shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

STD = 0.0075(14.4/Y) + F

where:

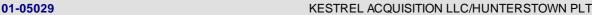
STD = allowable ISO corrected (if required as given in 40 CFR §60.335(b)(1)) NOx emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NOx emission allowance for fuel-bound nitrogen as defined in 40 CFR §60.332(a)(4), below.

[NOTE: THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a) OR SECTION E (GROUP SG11), CONDITION #001(g)(2)(ii)(A)]

- (2) [N/A PURSUANT TO 40 CFR §60.332(c)]
- (3) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
- (4) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
- (b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million BTU/hr) based on the lower heating value of the fuel fired shall comply with the provisions of 40 CFR §60.332(a)(1), above.
- (c) [N/A THE STATIONARY GAS TURBINES EACH HAVE A HEAT INPUT AT PEAK LOAD OF GREATER THAN 100 mmBTU/hr BASED ON THE LOWER HEATING VALUE OF THE FUEL FIRED]
- (d) [N/A THE STATIONARY GAS TURBINES EACH HAVE A MANUFACTURER'S RATED BASE LOAD AT ISO CONDITIONS OF GREATER THAN 30 MEGAWATTS]



- (e) [N/A THE STATIONARY GAS TURBINES EACH HAVE A HEAT INPUT AT PEAK LOAD OF GREATER THAN 100 mmBTU/hr BASED ON THE LOWER HEATING VALUE OF THE FUEL FIRED; ALSO, EACH STATIONARY GAS TURBINE COMMENCED CONSTRUCTION ON OR AFTER OCTOBER 3, 1982]
- (f) IN/A THE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL1
- (g) IN/A THE STATIONARY GAS TURBINES ARE EACH NOT EMERGENCY GAS TURBINES OR MILITARY GAS TURBINES OR FIRE FIGHTING GAS TURBINES]
- (h) [N/A THE STATIONARY GAS TURBINES ARE EACH NOT USED FOR RESEARCH AND DEVELOPMENT]
- (i) Exemptions from the requirements of 40 CFR §60.332(a), above, will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
- (j) [N/A THE STATIONARY GAS TURBINES EACH ARE EACH ELECTRIC UTILITY STATIONARY GAS TURBINES; ALSO, EACH STATIONARY GAS TURBINE COMMENCED CONSTRUCTION AFTER JANUARY 27, 1982]
- (k) IN/A THE STATIONARY GAS TURBINES ARE EACH NOT SUBJECT TO 40 CFR §60.332(a)(2), ABOVE, PURSUANT TO 40 CFR §60.332(c)]
- (I) [N/A THE STATIONARY GAS TURBINES EACH DO NOT SATISFY THE DEFINITION OF REGENERATIVE CYCLE GAS TURBINE OF 40 CFR §60.331(c)]

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.333]

Subpart GG - Standards of Performance for Stationary Gas Turbines Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by 40 CFR §60.8 is completed, every owner or operator subject to the provision of 40 CFR Part 60, Subpart GG, shall comply with one or the other of the following conditions:

- (a) No owner or operator subject to the provisions of 40 CFR Part 60, Subpart GG, shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.
- (b) No owner or operator subject to the provisions of 40 CFR Part 60, Subpart GG, shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

[Compliance with the requirement(s) specified in this streamlined operating permit condition assures compliance with the SO2 emission limit specified in 25 Pa. Code §123.21]

[44 FR 52798, Sept. 10, 1979, as amended at 69 FR 41360, July 8, 2004]

II. TESTING REQUIREMENTS.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.335] Subpart GG - Standards of Performance for Stationary Gas Turbines Test methods and procedures.

- (a) The owner or operator shall conduct the performance tests required in 40 CFR §60.8 using either
- (1) EPA Method 20,



- (2) ASTM D6522-00 (incorporated by reference, see 40 CFR §60.17), or
- (3) EPA Method 7E and either EPA Method 3 or 3A in Appendix A to 40 CFR Part 60, to determine NOx and diluent concentration.
- (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall 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.
- (5) Notwithstanding 40 CFR §60.335(a)(4), above, the owner or operator may test at fewer points than are specified in Method 1 or Method 20 if the following conditions are met:
 - (i) You may perform a stratification test for NOx and diluent pursuant to
 - (A) [Reserved]
 - (B) The procedures specified in Section 6.5.6.1(a) through (e) in Appendix A to 40 CFR Part 75.
- (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NOx concentrations, normalized to 15 percent O2, is within ± 10 percent of the mean normalized concentration for all traverse points, then you may use 3 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 3 points shall be located along the measurement line that exhibited the highest average normalized NOx concentration during the stratification test; or
- (B) If each of the individual traverse point NOx concentrations, normalized to 15 percent O2, is within ± 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.
- (6) Other acceptable alternative reference methods and procedures are given in 40 CFR §60.335(c), below.
- (b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in 40 CFR §60.332 and shall meet the performance test requirements of 40 CFR §60.8 as follows:
- (1) For each run of the performance test, the mean nitrogen oxides emission concentration (NOxo) corrected to 15 percent O2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSGs) equipped with duct burners; and units equipped with add-on emission control devices:
- NOx = (NOxo)(Pr/Po)0.5e19(Ho-0.00633)(288°K/Ta)1.53

Where:

NOx = emission concentration of NOx at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis,

NOxo = mean observed NOx concentration, ppm by volume, dry basis, at 15 percent O2,

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,

Po = observed combustor inlet absolute pressure at test, mm Hg,

Ho = observed humidity of ambient air, g H2 O/g air,

e = transcendental constant, 2.718, and





Ta = ambient temperature, °K.

- (2) The 3-run performance test required by 40 CFR §60.8 must be performed within ± 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR §60.331(r)).
- (3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NOx emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NOx emission limit in 40 CFR §60.332 for the combustion turbine must still be met.
- (4) [N/A THE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL]
- (5) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), ABOVE; WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in 40 CFR §60.335(b)(7), below) or as part of the initial performance test of the affected unit. [THE STATIONARY GAS TURBINES EACH EMPLOY A NOx CEMS]
- (7) If the owner or operator elects to install and certify a NOx CEMS under 40 CFR §60.334(e), then the initial performance test required under 40 CFR §60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
- (ii) Use the test data both to demonstrate compliance with the applicable NOx emission limit under 40 CFR §60.332 and to provide the required reference method data for the RATA of the CEMS described under 40 CFR §60.334(b).
 - (iii) The requirement to test at three additional load levels is waived.

[THE STATIONARY GAS TURBINES EACH EMPLOY A NOx CEMS]

- (8) [N/A THE STATIONARY GAS TURBINES EACH COMMENCED CONSTRUCTION ON OR BEFORE JULY 8, 2004; THEREFORE, THE STATIONARY GAS TURBINES ARE EACH NOT SUBJECT TO 40 CFR §60.334(f)]
- (9) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), ABOVE; WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
- (10) [N/A THE STATIONARY GAS TURBINES' SULFUR CONTENT MONITORING WILL EACH BE ACCOMPLISHED VIA COMPLIANCE WITH 40 CFR §60.334(h)(3), ABOVE]
- (11) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE MORE STRINGENT NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), ABOVE; WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED; ALSO, THE STATIONARY GAS TURBINES' SULFUR CONTENT MONITORING WILL EACH BE ACCOMPLISHED VIA COMPLIANCE WITH 40 CFR §60.334(h)(3), ABOVE]
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this operating permit condition [40 CFR §60.335]:





(1) Instead of using the equation in 40 CFR §60.335(b)(1), above, manufacturers may develop ambient condition correction factors to adjust the NOx emission level measured by the performance test as provided in 40 CFR §60.8 to ISO standard day conditions.

[69 FR 41363, July 8, 2004, as amended at 71 FR 9458, Feb. 24, 2006; 79 FR 11250, Feb. 27, 2014]

III. MONITORING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334] Subpart GG - Standards of Performance for Stationary Gas Turbines Monitoring of operations.

- (a) IN/A THE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL1
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NOx emissions may, as an alternative to operating the continuous monitoring system described in 40 CFR §60.334(a), above, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NOx and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOx concentrations to 15% O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F-14a or F-14b in Appendix F to Part 75 of Chapter I and making the adjustments to 15% O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1, is not required. The relative accuracy test audit (RATA) of the NOx and diluent monitors may be performed individually or on a combined basis. i.e., the relative accuracy tests of the CEMS may be performed either:
 - (i) On a ppm basis (for NOx) and a percent O2 basis for oxygen; or
 - (ii) On a ppm at 15 percent O2 basis; or
- (iii) On a ppm basis (for NOx) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15% O2).
- (2) As specified in 40 CFR §60.13(e)(2), during each full unit operating hour, each 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 for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR §60.13(h).
- (i) For each unit operating hour in which a valid hourly average, as described in 40 CFR §60.334(b)(2), above, is obtained for both NOx and diluent, the data acquisition and handling system must calculate and record the hourly NOx emissions in the units of the applicable NOx emission standard under 40 CFR §60.332(a), i.e., percent NOx by volume, dry basis, corrected to 15% O2 and International Organization for Standardization (ISO) standard conditions (if required as given in 40 CFR §60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0% O2, a diluent cap value of 19.0% O2 may be used in the emission calculations.
- (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.
- (iii) If the owner or operator has installed a NOx CEMS to meet the requirements of Part 75 of Chapter I, and is continuing to meet the ongoing requirements of Part 75 of Chapter I, the CEMS may be used to meet the requirements of this permit condition [40 CFR §60.334], except that the missing data substitution methodology provided for at 40 CFR Part 75, Subpart





D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR §60.7(c).

ITHE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL; HOWEVER, THE STATIONARY GAS TURBINES EACH EMPLOY A NOx CEMS]

- (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NOx emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of 40 CFR §60.334(b), above. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NOx emission limit under 40 CFR §60.332, that approved procedure may continue to be used. [THE STATIONARY GAS TURBINES CURRENTLY EMPLOY A NOx CEMS]
- (d) [N/A THE STATIONARY GAS TURBINES EACH COMMENCED CONSTRUCTION ON OR BEFORE JULY 8, 2004; ALSO, EACH STATIONARY GAS TURBINE DOES NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL]
- (e) [N/A THE STATIONARY GAS TURBINES EACH COMMENCED CONSTRUCTION ON OR BEFORE JULY 8, 2004]
- (f) [N/A THE STATIONARY GAS TURBINES EACH COMMENCED CONSTRUCTION ON OR BEFORE JULY 8, 2004]
- (g) [N/A THE STATIONARY GAS TURBINES ARE EACH NOT SUBJECT TO 40 CFR §60.334(a), (d) or (f)]
- (h) The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR Part 60, Subpart GG:
- (1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR §60.334(h)(3), below. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference - see 40 CFR §60.17), which measure the major sulfur compounds may be used; and
- (2) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE STRICTER NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
- (3) Notwithstanding the provisions of 40 CFR §60.334(h)(1), above, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR §60.331(u), regardless of whether an existing custom schedule approved by the Administrator for 40 CFR Part 60, Subpart GG, requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 is required.
- (4) [N/A A CUSTOM FUEL MONITORING SCHEDULE HAS NOT BEEN PREVIOUSLY APPROVED FOR ANY OF THE STATIONARY GAS TURBINES]
- (i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
- (1) [N/A THE STATIONARY GAS TURBINES EACH DO NOT FIRE FUEL OIL]
- (2) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE STRICTER NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL





BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED; ALSO, EACH STATIONARY GAS TURBINE'S SULFUR CONTENT MONITORING WILL BE ACCOMPLISHED VIA COMPLIANCE WITH 40 CFR §60.334(h)(3), ABOVE]

- (3) [N/A THE STATIONARY GAS TURBINES' SULFUR CONTENT MONITORING WILL EACH BE ACCOMPLISHED VIA COMPLIANCE WITH 40 CFR §60.334(h)(3), ABOVE]
- (j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under 40 CFR Part 60, Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
- (1) Nitrogen oxides.
- (i) [N/A THE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOX EMISSIONS CONTROL]
- (ii) [N/A THE STATIONARY GAS TURBINES ARE EACH SUBJECT TO THE STRICTER NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), WHICH ASSURES COMPLIANCE WITH 40 CFR §60.332(a)(1); FUEL BOUND NITROGEN ALLOWANCE IS NOT BEING CLAIMED]
 - (iii) For turbines using NOx and diluent CEMS:
- (A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit in 40 CFR §60.332(a)(1) or (2). For the purposes of 40 CFR Part 60, Subpart GG, a "4-hour rolling average NOx concentration" is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under 40 CFR §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour.
- (B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NOx concentration or diluent (or both).
- (C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in 40 CFR §60.334(b)(3)(ii), above, or if you are not using the ISO correction equation under the provisions of 40 CFR §60.335(b)(1).
- (iv) [N/A THE STATIONARY GAS TURBINES EACH COMMENCED CONSTRUCTION ON OR BEFORE JULY 8, 2004; THEREFORE, 40 CFR §60.334(f) IS NOT AN OPTION]
- (2) [N/A THE STATIONARY GAS TURBINES' SULFUR CONTENT MONITORING WILL EACH BE ACCOMPLISHED VIA COMPLIANCE WITH 40 CFR §60.334(h)(3), ABOVE]
- (3) [N/A THE STATIONARY GAS TURBINES EACH DO NOT USE WATER OR STEAM INJECTION FOR NOx EMISSIONS CONTROL]
- (4) [N/A THE STATIONARY GAS TURBINES ARE EACH NOT SUBJECT TO 40 CFR §60.332(a)(2), ABOVE, PURSUANT TO 40 CFR §60.332(c)]
- (5) All reports required under 40 CFR §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [i.e., THE REPORT FOR JANUARY 1 THROUGH JUNE 30 SHALL BE POSTMARKED BY JULY 30; THE REPORT FOR JULY 1 THROUGH DECEMBER 31 SHALL BE POSTMARKED BY JANUARY 30]

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41360, July 8, 2004; 71 FR 9457, Feb. 24, 2006]



01-05029

40 CFR §60.7(c) states the following:

- (c) Each owner or operator required to install a continuous monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in 40 CFR Part 60, Subpart GG) and/or summary report form (see 40 CFR §60.7(d), below) to the Administrator semiannually, except when the Administrator, on a case-bycase basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source(s). All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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.

005 [25 Pa. Code §127.512]

Operating permit terms and conditions.

In the event that 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines (NSPS Subpart GG) is revised, the permittee shall comply with the revised version of NSPS Subpart GG, and shall not be required to comply with any provisions in this operating permit designated as having NSPS Subpart GG as their authority, to the extent that such operating permit provisions would be inconsistent with the applicable provisions of the revised NSPS Subpart GG.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.330] Subpart GG - Standards of Performance for Stationary Gas Turbines

Applicability and designation of affected facility.

- (a) The provisions of 40 CFR Part 60, Subpart GG, are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million BTU) per hour, based on the lower heating value of the fuel fired.
- (b) Any facility under 40 CFR §60.330(a), above, which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of 40 CFR Part 60, Subpart GG, except as provided in 40 CFR §60.332(e)&(j).





[44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000]

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.331] Subpart GG - Standards of Performance for Stationary Gas Turbines Definitions.

Terms used in 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines, as well as Section E, Group SG05, are defined in the Clean Air Act; in 40 CFR §60.2 (General Provisions); and in 40 CFR §60.331.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4] Subpart A - General Provisions

Address.

The Group SG05 stationary gas turbines are subject to 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. The permittee shall comply with all applicable standards, compliance provisions, performance test, monitoring, record keeping, and reporting requirements contained at 40 CFR §§60.330 through 60.335, including all applicable portions of 40 CFR Part 60, Subpart A - General Provisions. The permittee shall comply with 40 CFR §60.4, which requires submission of copies of all requests, reports, applications, submittals, and other communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. 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 Department copies shall be forwarded to:

Regional Air Program Manager PA Department of Environmental Protection 909 Elmerton Avenue Harrisburg, PA 17110-8200

*** Permit Shield in Effect. ***







Group Name: SG06

Group Description: SOURCES SUBJECT TO NSPS SUBPART Da

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42Da]

Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978

Standard for particulate matter.

- (a) Except as provided in 40 CFR §60.42Da(f), below, on and after the date on which the initial performance test is completed or required to be completed under 40 CFR §60.8, whichever date comes first, an owner or operator of an affected facility shall not cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction, or modification commenced before March 1, 2005, any gases that contain PM in excess of 13 ng/J (0.03 lb/mmBTU) heat input. [NOTE: THE STEAM GENERATING UNITS ARE EACH SUBJECT TO THE MORE STRINGENT PM EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #006(c)(1); ALSO, SEE 40 CFR §60.42Da(f), BELOW]
- (b) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE THE OPACITY LIMITS OF 40 CFR §60.42Da(b) ARE NOT APPLICABLE PURSUANT TO 40 CFR §60.42Da(b)(2)]
- (c) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (d) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (e) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]
- (f) An owner or operator of an affected facility that meets the conditions in either 40 CFR §60.42Da(f)(1) or (2), below, is exempt from the PM emissions limits in this operating permit condition [40 CFR §60.42Da].
- (1) The affected facility combusts only gaseous or liquid fuels (excluding residual oil) with potential SO2 emissions rates of 26 ng/J (0.060 lb/mmBTU) or less, and that does not use a post-combustion technology to reduce emissions of SO2 or PM. [NOTE: THE STEAM GENERATING UNITS ARE EACH SUBJECT TO THE SO2 EMISSION LIMIT OF 0.0015 lb/mmBTU (HHV) OF SECTION E (GROUP SG01), CONDITION #006(b)(1); THEREFORE, THE PM EMISSION LIMIT OF 40 CFR §60.42Da(a), ABOVE, IS NOT APPLICABLE]
- (2) [N/A THE AFFECTED FACILITY IS NOT OPERATED UNDER A PM COMMERCIAL DEMONSTRATION PERMIT ISSUED BY THE ADMINISTRATOR]

[77 FR 9450, Feb. 16, 2012, as amended at 78 FR 24083, Apr. 24, 2013; 79 FR 68788, Nov. 19, 2014]

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43Da]

Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978

Standard for sulfur dioxide.

- (a) [N/A THE STEAM GENERATING UNITS EACH DO NOT COMBUST SOLID FUEL OR SOLID-DERIVED FUEL]
- (b) On and after the date on which the initial performance test is completed or required to be completed under 40 CFR §60.8, whichever date comes first, no owner or operator subject to the provisions of 40 CFR Part 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts liquid or gaseous fuels (except for liquid or gaseous fuels derived from solid fuels and as provided under 40 CFR §60.43Da(e) or (h), below) and for which construction, reconstruction, or modification commenced before or on February 28, 2005, any gases that contain SO2 in





excess of:

- (1) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS]; or
- (2) 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/mmBTU) heat input. [NOTE: THE STEAM GENERATING UNITS ARE EACH SUBJECT TO THE MORE STRINGENT SO2 EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #006(b)(1)]
- (c) [N/A THE STEAM GENERATING UNITS EACH DO NOT COMBUST SOLID SOLVENT REFINED COAL (SRC-1)]
- (d) [N/A THE STEAM GENERATING UNITS EACH DO NOT COMBUST ANTHRACITE COAL AND ARE NOT DEFINED AS A RESOURCE RECOVERY UNIT; AND THE FACILITY IS NOT LOCATED IN A NONCONTINENTAL AREA]
- (e) [N/A THE FACILITY IS NOT LOCATED IN A NONCONTINENTAL AREA]
- (f) [N/A THE FACILITY IS NOT OPERATED UNDER A SO2 COMMERCIAL DEMONSTRATION PERMIT ISSUED BY THE ADMINISTRATOR]
- (g) Compliance with the emission limitation and percent reduction requirements of this operating permit condition [40 CFR §60.43Da] are both determined on a 30-day rolling average basis except as provided under 40 CFR §60.43Da(c), above.
- (h) [N/A THE STEAM GENERATING UNITS EACH COMBUST NATURAL GAS EXCLUSIVELLY; THEY DO NOT COMBUST DIFFERENT FUELS SIMULTANEOUSLY]
- (i) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (j) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005; ALSO, THE UNITS DO NOT COMBUST COAL REFUSE]
- (k) [N/A THE FACILITY IS NOT LOCATED IN A NONCONTINENTAL AREA; ALSO, THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (I) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]
- (m) [N/A THE FACILITY IS NOT LOCATED IN A NONCONTINENTAL AREA; ALSO, THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]

[72 FR 32722, June 13, 2007, as amended at 77 FR 9450, Feb. 16, 2012]

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44Da]

Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978
Standard for nitrogen oxides.

- (a) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR AFTER JULY 10, 1997]
- (b) (c) [Reserved]
- (d) Except as provided in 40 CFR §60.44Da(h), below, on and after the date on which the initial performance test is completed or required to be completed under 40 CFR §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after July 9, 1997, but before March 1, 2005, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOx (expressed as NO2) in excess of the applicable emissions limit specified in 40 CFR §60.44Da(d)(1) and (2), below, as determined on a 30-boiler operating day rolling average basis.
- (1) For an affected facility which commenced construction, any gases that contain NOx in excess of 200 ng/J (1.6 lb/MWh) gross energy output.





- (2) [N/A THE STEAM GENERATING UNITS EACH HAD NOT COMMENCED RECONSTRUCTION BEFORE MARCH 1, 20051
- (e) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (f) IN/A THE STEAM GENERATING UNITS ARE EACH NOT DEFINED AS AN IGCC ELECTRIC UTILITY STEAM GENERATING UNIT; ALSO, THE UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (g) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]
- (h) [N/A THE FACILITY IS NOT OPERATED UNDER A NOX COMMERCIAL DEMONSTRATION PERMIT ISSUED BY THE ADMINISTRATOR1

[77 FR 9451, Feb. 16, 2012]

II. TESTING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48Da] Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978 Compliance provisions.

- (a) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, the applicable PM emissions limit and opacity standard under 40 CFR §60.42Da, SO2 emissions limit under 40 CFR §60.43Da, and NOx emissions limit under 40 CFR §60.44Da apply at all times except during periods of startup, shutdown, or malfunction. For affected facilities for which construction, modification, or reconstruction commenced after May 3, 2011, the applicable SO2 emissions limit under 40 CFR §60.43Da, NOx emissions limit under 40 CFR §60.44Da, and NOx plus CO emissions limit under 40 CFR §60.45Da apply at all times. The applicable PM emissions limit and opacity standard under 40 CFR §60.42Da apply at all times except during periods of startup and shutdown.
- (b) After the initial performance test required under 40 CFR §60.8, compliance with the applicable SO2 emissions limit and percentage reduction requirements under 40 CFR §60.43Da, NOx emissions limit under 40 CFR §60.44Da, and NOx plus CO emissions limit under 40 CFR §60.45Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30-boiler operating day rolling average emission rate for both SO2, NOx or NOx plus CO as applicable, and a new percent reduction for SO2, are calculated to demonstrate compliance with the standards.
- (c) For the initial performance test required under 40 CFR §60.8, compliance with the applicable SO2 emissions limits and percentage reduction requirements under 40 CFR §60.43Da, the NOx emissions limits under 40 CFR §60.44Da, and the NOx plus CO emissions limits under 40 CFR §60.45Da is based on the average emission rates for SO2, NOx, CO, and percent reduction for SO2 for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
- (d) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, compliance with applicable 30-boiler operating day rolling average SO2 and NOx emissions limits is determined by calculating the arithmetic average of all hourly emission rates for SO2 and NOx for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction. For affected facilities for which construction, modification, or reconstruction commenced after May 3, 2011, compliance with applicable 30-boiler operating day rolling average SO2 and NOx emissions limits is determined by dividing the sum of the SO2 and NOx emissions for the 30 successive boiler operating days by the sum of the gross energy output or net energy output, as applicable, for the 30 successive boiler operating days.
- (e) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS]
- (f) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, compliance





with the applicable daily average PM emissions limit is determined by calculating the arithmetic average of all hourly emission rates each boiler operating day, except for data obtained during startup, shutdown, or malfunction periods. Daily averages are only calculated for boiler operating days that have non-out-of-control data for at least 18 hours of unit operation during which the standard applies. Instead, all of the non-out-of-control hourly emission rates of the operating day(s) not meeting the minimum 18 hours non-out-of-control data daily average requirement are averaged with all of the non-out-ofcontrol hourly emission rates of the next boiler operating day with 18 hours or more of non-out-of-control PM CEMS data to determine compliance. For affected facilities for which construction or reconstruction commenced after May 3, 2011 that elect to demonstrate compliance using PM CEMS, compliance with the applicable PM emissions limit in 40 CFR §60.42Da is determined on a 30-boiler operating day rolling average basis by calculating the arithmetic average of all hourly PM emission rates for the 30 successive boiler operating days, except for data obtained during periods of startup and shutdown.

- (g) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]
- (h) If an owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR §60.49Da, compliance of the affected facility with the emission requirements under 40 CFR §§60.43Da and 60.44Da for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in Section 7 of Method 19 of Appendix A of 40 CFR Part 60.
- (i) Compliance provisions for sources subject to 40 CFR §60.44Da(d)(1), (e)(1), (e)(2)(i), (e)(3)(i), (f), or (g). The owner or operator shall calculate NOx emissions as 0.0000001194 lb/scf-ppm multiplied by the average hourly NOx output concentration in ppm (measured according to the provisions of 40 CFR §60.49Da(c)), multiplied by the average hourly flow rate (measured in scfh, according to the provisions of 40 CFR §60.49Da(I) or §60.49Da(m)), divided by the average hourly gross energy output (measured according to the provisions of 40 CFR §60.49Da(k)), or the average hourly net energy output, as applicable. Alternatively, for oil-fired and gas-fired units, NOx emissions may be calculated by multiplying the hourly NOx emission rate in lb/mmBTU (measured by the CEMS required under 40 CFR §60.49Da(c) and (d)), by the hourly heat input rate (measured according to the provisions of 40 CFR §60.49Da(n)), and dividing the result by the average gross energy output (measured according to the provisions of 40 CFR §60.49Da(k)) or the average hourly net energy output, as applicable.
- (j) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.44Da(a)(1)]
- (k) Compliance provisions for duct burners subject to 40 CFR §60.44Da(d)(1) or (e)(1). To determine compliance with the emission limitation for NOx required by 40 CFR §60.44Da(d)(1) or (e)(1) for duct burners used in combined cycle systems, either of the procedures described in 40 CFR §60.48Da(k)(1) and (2), below, may be used:
- (1) The owner or operator of an affected duct burner used in combined cycle systems shall determine compliance with the applicable NOx emission limitation in 40 CFR §60.44Da(d)(1) or (e)(1) as follows:
 - (i) The emission rate (E) of NOx shall be computed using Equation 2, below:

E = [(Csg * Qsg) - (Cte * Qte)]/(Osg * h) (Equation 2)

Where:

E = Emission rate of NOx from the duct burner, ng/J (lb/MWh) gross energy output;

Csg = Average hourly concentration of NOx exiting the steam generating unit, ng/dscm (lb/dscf);

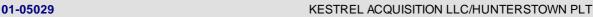
Cte = Average hourly concentration of NOx in the turbine exhaust upstream from duct burner, ng/dscm (lb/dscf);

Qsg = Average hourly volumetric flow rate of exhaust gas from steam generating unit, dscm/h (dscf/h);

Qte = Average hourly volumetric flow rate of exhaust gas from combustion turbine, dscm/h (dscf/h);

Osg = Average hourly gross energy output from steam generating unit, J/h (MW); and





- h = Average hourly fraction of the total heat input to the steam generating unit derived from the combustion of fuel in the affected duct burner.
- (ii) Method 7E of Appendix A of 40 CFR Part 60 shall be used to determine the NOx concentrations (Csg and Cte). Method 2, 2F or 2G of Appendix A of 40 CFR Part 60, as appropriate, shall be used to determine the volumetric flow rates (Qsg and Qte) of the exhaust gases. The volumetric flow rate measurements shall be taken at the same time as the concentration measurements.
- (iii) The owner or operator shall develop, demonstrate, and provide information satisfactory to the Administrator to determine the average hourly gross energy output from the steam generating unit, and the average hourly percentage of the total heat input to the steam generating unit derived from the combustion of fuel in the affected duct burner.
- (iv) Compliance with the applicable NOx emission limitation in 40 CFR §60.44Da(d)(1) or (e)(1) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests.
- (2) The owner or operator of an affected duct burner used in a combined cycle system may elect to determine compliance with the applicable NOx emission limitation in 40 CFR §60.44Da(d)(1) or (e)(1) on a 30-day rolling average basis as indicated in 40 CFR §60.48Da(k)(2)(i) through (iv), below.
 - (i) The emission rate (E) of NOx shall be computed using Equation 3, below:

E = (Csg * Qsg) / (Occ) (Equation 3)

Where:

E = Emission rate of NOx from the duct burner, ng/J (lb/MWh) gross energy output;

Csq = Average hourly concentration of NOx exiting the steam generating unit, ng/dscm (lb/dscf);

Qsg = Average hourly volumetric flow rate of exhaust gas from steam generating unit, dscm/h (dscf/h); and

Occ = Average hourly gross energy output from entire combined cycle unit, J/h (MW).

- (ii) The CEMS specified under 40 CFR §60.49Da for measuring NOx and O2 (or CO2) shall be used to determine the average hourly NOx concentrations (Csg). The continuous flow monitoring system specified in 40 CFR §60.49Da(I) or §60.49Da(m) shall be used to determine the volumetric flow rate (Qsg) of the exhaust gas. If the option to use the flow monitoring system in 40 CFR §60.49Da(m) is selected, the flow rate data used to meet the requirements of 40 CFR §60.51Da shall not include substitute data values derived from the missing data procedures in Subpart D of Part 75 of Chapter I, nor shall the data have been bias adjusted according to the procedures of Part 75 of Chapter I. The sampling site shall be located at the outlet from the steam generating unit.
- (iii) The continuous monitoring system specified under 40 CFR §60.49Da(k) for measuring and determining gross energy output shall be used to determine the average hourly gross energy output from the entire combined cycle unit (Occ), which is the combined output from the combustion turbine and the steam generating unit.
- (iv) The owner or operator may, in lieu of installing, operating, and recording data from the continuous flow monitoring system specified in 40 CFR §60.49Da(I), determine the mass rate (lb/h) of NOx emissions by installing, operating, and maintaining continuous fuel flowmeters following the appropriate measurements procedures specified in Appendix D of Part 75 of Chapter I. If this compliance option is selected, the emission rate (E) of NOx shall be computed using Equation 4, below:

E = (ERsg * Hcc) / (Occ) (Equation 4)

Where:

E = Emission rate of NOx from the duct burner, ng/J (lb/MWh) gross energy output;



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ERsg = Average hourly emission rate of NOx exiting the steam generating unit heat input calculated using appropriate F factor as described in Method 19 of Appendix A of 40 CFR Part 60, ng/J (lb/mmBTU);

Hcc = Average hourly heat input rate of entire combined cycle unit, J/h (mmBTU/h); and

Occ = Average hourly gross energy output from entire combined cycle unit, J/h (MW).

- (3) When an affected duct burner steam generating unit utilizes a common steam turbine with one or more affected duct burner steam generating units, the owner or operator shall either:
- (i) Determine compliance with the applicable NOx emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common steam turbine; or
- (ii) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the steam turbine for each of the affected duct burners. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions regulated under 40 CFR Part 60.
- (I) [Reserved]
- (m) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.43Da(i)(1)(i), (i)(2)(i), (j)(1)(i), (j)(2)(i), (j)(2)(i), (j)(3)(i), (j)(2)(i), (j)(3)(i), (j)(3)(i), (j)(4)(i), (j)(4)(i),
- (n) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.42Da(c)(1) OR (e)(1)(i)]
- (o) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.42Da(c)(2), (d), OR (e)(1)(ii)]
- (p) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.48Da(o)]
- (q) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.42Da(b) PURSUANT TO 40 CFR §60.42Da(b)(2)]
- (r) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.45Da]
- (s) Affirmative defense for exceedance of emissions limit during malfunction. In response to an action to enforce the standards set forth in 40 CFR §§60.42Da, 60.43Da, 60.44Da, and 60.45Da, you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined at 40 CFR §60.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense as specified in 40 CFR §60.48Da(s)(1) and (2), below. The affirmative defense shall not be available for claims for injunctive relief.
- (1) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in 40 CFR §60.48Da(s)(2), below, and must prove by a preponderance of evidence that:
 - (i) The excess emissions:
- (A) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner; and
- (B) Could not have been prevented through careful planning, proper design, or better operation and maintenance practices; and
 - (C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
 - (D) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
 - (ii) Repairs were made as expeditiously as possible when the applicable emissions limits were being exceeded. Off-





shift and overtime labor were used, to the extent practicable, to make these repairs; and

- (iii) The frequency, amount, and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and
- (iv) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (v) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment, and human health; and
- (vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
- (vii) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and
 - (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and
- (ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.
- (2) Notification. The owner or operator of the affected source experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction or, if it is not possible to determine within two business days whether the malfunction caused or contributed to an exceedance, no later than two business days after the owner or operator knew or should have known that the malfunction caused or contributed to an exceedance, but, in no event later than two business days after the end of the averaging period, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in 40 CFR §60.48Da(s)(1), above. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

[72 FR 32722, June 13, 2007, as amended at 74 FR 5079, Jan. 28, 2009; 76 FR 3522, Jan. 20, 2011; 77 FR 9454, Feb. 16, 2012; 78 FR 24083, Apr. 24, 2013; 81 FR 20180, Apr. 6, 2016]

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.50Da]
Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is
Commenced After September 18, 1978

Compliance determination procedures and methods.

- (a) In conducting the performance tests required in 40 CFR §60.8, the owner or operator shall use as reference methods and procedures the methods in Appendix A of 40 CFR Part 60 or the methods and procedures as specified in this operating permit condition [40 CFR §60.50Da], except as provided in 40 CFR §60.8(b). 40 CFR §60.8(f) does not apply to this operating permit condition [40 CFR §60.50Da] for SO2 and NOx. Acceptable alternative methods are given in 40 CFR §60.50Da(e), below.
- (b) In conducting the performance tests to determine compliance with the PM emissions limits in 40 CFR §60.42Da, the owner or operator shall meet the requirements specified in 40 CFR §60.50Da(b)(1) through (3), below.
- (1) The owner or operator shall measure filterable PM to determine compliance with the applicable PM emissions limit in 40 CFR §60.42Da as specified in 40 CFR §60.50Da(b)(1)(i) through (ii), below.





- (i) The dry basis F factor (O2) procedures in Method 19 of Appendix A of 40 CFR Part 60 shall be used to compute the emission rate of PM.
- (ii) For the PM concentration, Method 5 of Appendix A of 40 CFR Part 60 shall be used for an affected facility that does not use a wet FGD. For an affected facility that uses a wet FGD, Method 5B of Appendix A of 40 CFR Part 60 shall be used downstream of the wet FGD.
- (A) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160.14°C (320.25°F).
- (B) For each PM run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B of Appendix A of 40 CFR Part 60 shall be used to determine the O2 concentration. The O2 sample shall be obtained simultaneously with, and at the same traverse points as, the PM run. If the PM run has more than 12 traverse points, the O2 traverse points may be reduced to 12 provided that Method 1 of Appendix A of 40 CFR Part 60 is used to locate the 12 O2 traverse points. If the grab sampling procedure is used, the O2 concentration for the run shall be the arithmetic mean of the sample O2 concentrations at all traverse points.
- (2) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011]
- (3) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE THE OPACITY LIMITS OF 40 CFR §60.42Da(b) ARE NOT APPLICABLE PURSUANT TO 40 CFR §60.42Da(b)(2)]
- (c) The owner or operator shall determine compliance with the SO2 standards in §60.43Da as follows:
- (1) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS NOR UNDERGO FUEL PRETREATMENT; THEY ARE EACH SUBJECT TO THE 40 CFR §60.43Da(b)(2) SO2 EMISSION LIMIT WHICH REQUIRES 0% REDUCTION OF THE POTENTIAL COMBUSTION CONCENTRATION]
- (2) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS NOR SUCH PROCESSES AS FUEL PRETREATMENT, COAL PULVERIZERS, OR BOTTOM AND FLY ASH INTERACTIONS; THEY ARE EACH SUBJECT TO THE 40 CFR §60.43Da(b)(2) SO2 EMISSION LIMIT WHICH REQUIRES 0% REDUCTION OF THE POTENTIAL COMBUSTION CONCENTRATION]
- (3) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS; THEY ARE EACH SUBJECT TO THE 40 CFR §60.43Da(b)(2) SO2 EMISSION LIMIT WHICH REQUIRES 0% REDUCTION OF THE POTENTIAL COMBUSTION CONCENTRATION]
- (4) The appropriate procedures in Method 19 of Appendix A of 40 CFR Part 60 shall be used to determine the emission rate.
- (5) The CEMS in 40 CFR §60.49Da(b) and (d) shall be used to determine the concentrations of SO2 and CO2 or O2.
- (d) The owner or operator shall determine compliance with the NOx standard in 40 CFR §60.44Da as follows:
- (1) The appropriate procedures in Method 19 of Appendix A of 40 CFR Part 60 shall be used to determine the emission rate of NOx.
- (2) The continuous monitoring system in 40 CFR §60.49Da(c) and (d) shall be used to determine the concentrations of NOx and CO2 or O2.
- (e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this operating permit condition [40 CFR §60.50Da]:
- (1) For Method 5 or 5B of Appendix A-3 of 40 CFR Part 60, Method 17 of Appendix A-6 of 40 CFR Part 60 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average temperature of 160°C (320°F). The procedures of Sections 8.1 and 11.1 of Method 5B of Appendix A-3 of 40 CFR Part 60





may be used in Method 17 of Appendix A-6 of 40 CFR Part 60 only if it is used after wet FGD systems. Method 17 of Appendix A-6 of 40 CFR Part 60 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

- (2) The Fc factor (CO2) procedures in Method 19 of Appendix A of 40 CFR Part 60 may be used to compute the emission rate of PM under the stipulations of 40 CFR §60.46(d)(1). The CO2 shall be determined in the same manner as the O2 concentration.
- (f) The owner or operator of an electric utility combined cycle gas turbine that does not meet the definition of an IGCC must conduct performance tests for PM, SO2, and NOx using the procedures of Method 19 of Appendix A-7 of 40 CFR Part 60. The SO2 and NOx emission rates calculations from the gas turbine used in Method 19 of Appendix A-7 of 40 CFR Part 60 are determined when the gas turbine is performance tested under 40 CFR Part 60, Subpart GG. The potential uncontrolled PM emission rate from a gas turbine is defined as 17 ng/J (0.04 lb/mmBTU) heat input.

[72 FR 32722, June 13, 2007, as amended at 74 FR 5083, Jan. 28, 2009; 77 FR 9458, Feb. 16, 2012; 78 FR 24084, Apr. 24, 2013]

III. MONITORING REQUIREMENTS.

- # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49Da] Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is **Commenced After September 18, 1978 Emission monitoring.**
- (a) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO 40 CFR §60.42Da(b) PURSUANT TO 40 CFR §60.42Da(b)(2); THEREFORE, OPACITY COMS ARE NOT REQUIRED]
- (b) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY AND THEY ARE EACH SUBJECT TO THE MORE STRINGENT SO2 EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #006(b)(1), THAT IS LOWER THAN 0.06 lb/mmBTU; THEREFORE, SO2 CEMS ARE NOT REQUIRED]
- (c)(1) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a CEMS, and record the output of the system, for measuring NOx emissions discharged to the atmosphere; or
- (2) If the owner or operator has installed a NOx emission rate CEMS to meet the requirements of Part 75 of Chapter I and is continuing to meet the ongoing requirements of Part 75 of Chapter I, that CEMS may be used to meet the requirements of 40 CFR §60.49Da(c), except that the owner or operator shall also meet the requirements of 40 CFR §60.51Da. Data reported to meet the requirements of 40 CFR §60.51Da shall not include data substituted using the missing data procedures in Subpart D of Part 75 of Chapter I, nor shall the data have been bias adjusted according to the procedures of Part 75 of Chapter I.
- (d) [N/A THE FACILITY IS REQUIRED TO COMPLY WITH AN OUTPUT-BASED NOX EMISSIONS LIMIT PURSUANT TO 40 CFR §60.44Da(d)(1); ALSO, SO2 CEMS ARE NOT REQUIRED PURSUANT TO 40 CFR §60.49Da(b), ABOVE]
- (e) The CEMS under 40 CFR §60.49Da(b), (c), and (d), above, are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.
- (f)(1) For units that began construction, reconstruction, or modification on or before February 28, 2005, the owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with CEMS, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR §60.49Da(h), below.
- (2) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE FEBRUARY 28, 2005]
- (g) The 1-hour averages required under 40 CFR§60.13(h) are expressed in ng/J (lb/mmBTU) heat input and used to calculate the average emission rates under 40 CFR§60.48Da. The 1-hour averages are calculated using the data points



required under 40 CFR §60.13(h)(2).

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- (h) When it becomes necessary to supplement CEMS data to meet the minimum data requirements in 40 CFR §60.49Da(f), above, the owner or operator shall use the reference methods and procedures as specified in this paragraph [40 CFR §60.49Da(h)]. Acceptable alternative methods and procedures are given in 40 CFR §60.49Da(j), below.
- (1) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE SO2 CEMS ARE NOT REQUIRED]
- (2) Method 7 of Appendix A of 40 CFR Part 60 shall be used to determine the NOx concentration at the same location as the NOx monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
- (3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B of Appendix A of 40 CFR Part 60 shall be used to determine the O2 or CO2 concentration at the same location as the O2 or CO2 monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
- (4) The procedures in Method 19 of Appendix A of 40 CFR Part 60 shall be used to compute each 1-hour average concentration in ng/J (lb/mmBTU) heat input.
- (i) The owner or operator shall use methods and procedures in this paragraph [40 CFR §60.49Da(i)] to conduct monitoring system performance evaluations under 40 CFR §60.13(c) and calibration checks under 40 CFR §60.13(d). Acceptable alternative methods and procedures are given in 40 CFR §60.49Da(j), below.
- (1) Methods 3B, 6, and 7 of Appendix A of 40 CFR Part 60 shall be used to determine O2, SO2, and NOx concentrations, respectively.
- (2) SO2 or NOx (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N2, as applicable) under Performance Specification 2 of Appendix B of 40 CFR Part 60.
- (3) For affected facilities burning only fossil fuel, the span value for a COMS is between 60 and 80 percent. Span values for a CEMS measuring NOx shall be determined using one of the following procedures:
- (i) Except as provided under 40 CFR §60.49Da(i)(3)(ii), below, NOx span values shall be determined as follows: For natural gas fuel, the NOx span value = 500 ppm.
- (ii) As an alternative to meeting the requirements of 40 CFR §60.49Da(i)(3)(i), above, the owner or operator of an affected facility may elect to use the NOx span values determined according to Section 2.1.2 in Appendix A to Part 75 of Chapter I.
- (4) All span values computed under 40 CFR §60.49Da(i)(3)(i), above, for burning combinations of fossil fuels are rounded to the nearest 500 ppm. Span values computed under 40 CFR §60.49Da(i)(3)(ii), above, shall be rounded off according to Section 2.1.2 in Appendix A to Part 75 of Chapter I.
- (5) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE SO2 CEMS ARE NOT REQUIRED]
- (j) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this operating permit condition [40 CFR §60.49Da]:
- (1) For Method 6 of Appendix A of 40 CFR Part 60, Method 6A or 6B (whenever Methods 6 and 3 or 3B of Appendix A of 40 CFR Part 60 data are used) or 6C of Appendix A of 40 CFR Part 60 may be used. Each Method 6B of Appendix A of 40 CFR Part 60 sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B of Appendix A of 40 CFR Part 60 is used under 40 CFR §60.49Da(i), above, the conditions under 40 CFR §60.48Da(d)(1) apply; these conditions do not apply under 40 CFR §60.49Da(h), above.
- (2) For Method 7 of Appendix A of 40 CFR Part 60, Method 7A, 7C, 7D, or 7E of Appendix A of 40 CFR Part 60 may be used. If Method 7C, 7D, or 7E of Appendix A of 40 CFR Part 60 is used, the sampling time for each run shall be 1 hour.



- (3) For Method 3 of Appendix A of 40 CFR Part 60, Method 3A or 3B of Appendix A of 40 CFR Part 60 may be used if the sampling time is 1 hour.
- (4) For Method 3B of Appendix A of 40 CFR Part 60, Method 3A of Appendix A of 40 CFR Part 60 may be used.
- (k) The procedures specified in 40 CFR §60.49Da(k)(1) through (3), below, shall be used to determine gross energy output for sources demonstrating compliance with an output-based standard.
- (1) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain, and operate a wattmeter; measure gross electrical output in MWh on a continuous basis; and record the output of the monitor.
- (2) The owner or operator of an affected facility with process steam generation shall install, calibrate, maintain, and operate meters for steam flow, temperature, and pressure; measure gross process steam output in joules per hour (or BTU per hour) on a continuous basis; and record the output of the monitor.
- (3) [N/A THE STEAM GENERATING UNITS EACH DO NOT GENERATE PROCESS STEAM]
- (I) The owner or operator of an affected facility demonstrating compliance with an output-based standard shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B of 40 CFR Part 60 and the calibration drift (CD) assessment, relative accuracy test audit (RATA), and reporting provisions of Procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the volumetric flow rate of exhaust gases discharged to the atmosphere; or
- (m) Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20(c) of Chapter I and Appendix A to Part 75 of Chapter I, and continuing to meet the applicable quality control and quality assurance requirements of 40 CFR §75.21 of Chapter I and Appendix B to Part 75 of Chapter I, may be used. Flow rate data reported to meet the requirements of 40 CFR §60.51Da shall not include substitute data values derived from the missing data procedures in Subpart D of Part 75 of Chapter I, nor shall the data have been bias adjusted according to the procedures of Part 75 of Chapter I.
- (n) Gas-fired and oil-fired units. The owner or operator of an affected unit that qualifies as a gas-fired or oil-fired unit, as defined in 40 CFR §72.2, may use, as an alternative to the requirements specified in either 40 CFR §60.49Da(l) or (m), above, a fuel flow monitoring system certified and operated according to the requirements of Appendix D of Part 75 of Chapter I.
- (o) The owner or operator of a duct burner, as described in 40 CFR §60.41Da, which is subject to the NOx standards of 40 CFR §60.44Da(a)(1), (d)(1), or (e)(1) is not required to install or operate a CEMS to measure NOx emissions; a wattmeter to measure gross electrical output; meters to measure steam flow, temperature, and pressure; and a continuous flow monitoring system to measure the flow of exhaust gases discharged to the atmosphere.
- (p)-(r) [Reserved]
- (s) The owner or operator shall prepare and submit to the Administrator for approval a unit-specific monitoring plan for each monitoring system, at least 45 days before commencing certification testing of the monitoring systems. The owner or operator shall comply with the requirements in your plan. The plan must address the requirements in 40 CFR §60.49Da(s)(1) through (6), below.
- (1) Installation of the CEMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of the exhaust emissions (e.g., on or downstream of the last control device);
- (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;
- (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations, relative accuracy test audits (RATA), etc.);



- (4) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §60.13(d) or Part 75 of Chapter I (as applicable);
- (5) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR §60.13 or Part 75 of Chapter I (as applicable); and
- (6) Ongoing recordkeeping and reporting procedures in accordance with the requirements of 40 CFR Part 60, Subpart Da.
- (t) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO AN OUTPUT-BASED PM EMISSIONS LIMIT UNDER 40 CFR §60.42Da; THEREFORE, PM CEMS/CPMS ARE NOT REQUIRED]
- (u) [N/A THE STEAM GENERATING UNITS EACH COMMENCED CONSTRUCTION ON OR BEFORE MAY 3, 2011; THEREFORE, THEY ARE EACH NOT SUBJECT TO A CO EMISSIONS LIMIT PURSUANT TO 40 CFR §60.45Da(a)]
- (v) [N/A THE STEAM GENERATING UNITS ARE EACH NOT SUBJECT TO AN OUTPUT-BASED PM EMISSIONS LIMIT UNDER 40 CFR §60.42Da; THEREFORE, PM CEMS/CPMS ARE NOT REQUIRED PURSUANT TO 40 CFR §60.49Da(t), ABOVE]
- (w) The owner or operator using a SO2, NOx, CO2, and O2 CEMS to meet the requirements of 40 CFR Part 60, Subpart Da, shall install, certify, operate, and maintain the CEMS as specified in 40 CFR §60.49Da(w)(1) through (w)(5), below.
- (1) Except as provided for under 40 CFR §60.49Da(w)(2), (w)(3), and (w)(4), below, each SO2, NOx, CO2, and O2 CEMS required under 40 CFR §60.49Da(b) through (d), above, shall be installed, certified, and operated in accordance with the applicable procedures in Performance Specification 2 or 3 in Appendix B to 40 CFR Part 60 or according to the procedures in Appendices A and B to 40 CFR Part 75. Daily calibration drift assessments and quarterly accuracy determinations shall be done in accordance with Procedure 1 in Appendix F to 40 CFR Part 60, and a data assessment report (DAR), prepared according to Section 7 of Procedure 1 in Appendix F to 40 CFR Part 60, shall be submitted with each compliance report required under 40 CFR §60.51Da.
- (2) As an alternative to meeting the requirements of 40 CFR §60.49Da(w)(1), above, an owner or operator may elect to implement the following alternative data accuracy assessment procedures. For all required CO2 and O2 CEMS and for SO2 and NOx CEMS with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in Sections 2.1.1 and 2.1.3 of Appendix B to 40 CFR Part 75 may be followed instead of the CD assessment procedures in Procedure 1, Section 4.1 of Appendix F of 40 CFR Part 60. If this option is selected, the data validation and out-of-control provisions in Sections 2.1.4 and 2.1.5 of Appendix B to 40 CFR Part 75 shall be followed instead of the excessive CD and out-of-control criteria in Procedure 1, Section 4.3 of Appendix F to 40 CFR Part 60. For the purposes of data validation under 40 CFR Part 60, Subpart Da, the excessive CD and out-of-control criteria in Procedure 1, Section 4.3 of Appendix F to 40 CFR Part 60 shall apply to SO2 and NOx span values less than 100 ppm.
- (3) As an alternative to meeting the requirements of 40 CFR §60.49Da(w)(1), above, an owner or operator may elect to may elect to implement the following alternative data accuracy assessment procedures. For all required CO2 and O2 CEMS and for SO2 and NOx CEMS with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with Section 2.2.1 of Appendix B to 40 CFR Part 75, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, Section 5.1.2 of Appendix F to 40 CFR Part 60. If this option is selected: The frequency of the linearity checks shall be as specified in Section 2.2.1 of Appendix B to 40 CFR Part 75; the applicable linearity specifications in Section 3.2 of Appendix A to 40 CFR Part 75 shall be met; the data validation and out-of-control criteria in Section 2.2.3 of Appendix B to 40 CFR Part 75 shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, Section 5.2 of Appendix F to 40 CFR Part 60; and the grace period provisions in Section 2.2.4 of Appendix B to 40 CFR Part 75 shall apply. For the purposes of data validation under 40 CFR Part 60, Subpart Da, the cylinder gas audits described in Procedure 1, Section 5.1.2 of Appendix F to 40 CFR Part 60 shall be performed for SO2 and NOx span values less than or equal to 30 ppm.
- (4) As an alternative to meeting the requirements of 40 CFR §60.49Da(w)(1), above, an owner or operator may elect to may elect to implement the following alternative data accuracy assessment procedures. For SO2, CO2, and O2 CEMS and for NOx CEMS, RATAs may be performed in accordance with Section 2.3 of Appendix B to 40 CFR Part 75 instead of following the procedures described in Procedure 1, Section 5.1.1 of Appendix F to 40 CFR Part 60. If this option is selected: The frequency of each RATA shall be as specified in Section 2.3.1 of Appendix B to 40 CFR Part 75; the applicable relative



accuracy specifications shown in Figure 2 in Appendix B to 40 CFR Part 75 shall be met; the data validation and out-ofcontrol criteria in Section 2.3.2 of Appendix B to 40 CFR Part 75 shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, Section 5.2 of Appendix F to 40 CFR Part 60; and the grace period provisions in Section 2.3.3 of Appendix B to 40 CFR Part 75 shall apply. For the purposes of data validation under 40 CFR Part 60, Subpart Da, the relative accuracy specification in Section 13.2 of Performance Specification 2 in Appendix B to 40 CFR Part 60 shall be met on a lb/mmBTU basis for SO2 (regardless of the SO2 emission level during the RATA), and for NOx when the average NOx emission rate measured by the reference method during the RATA is less than 0.100 lb/mmBTU.

(5) If the owner or operator elects to implement the alternative data assessment procedures described in 40 CFR §60.49Da(w)(2) through (w)(4), above, each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by 40 CFR §60.49Da(w)(2) through (w)(4), above.

[72 FR 32722, June 13, 2007, as amended at 74 FR 5081, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9456, Feb. 16, 2012; 77 FR 23402, Apr. 19, 2012; 78 FR 24083, Apr. 24, 2013]

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.51Da] Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978

Reporting requirements.

- (a) For SO2, NOx, PM, and NOx plus CO emissions, the performance test data from the initial and subsequent performance tests and from the performance evaluation of the continuous monitors (including the transmissometer) must be reported to the Administrator.
- (b) For SO2 and NOx, the following information is reported to the Administrator for each 24-hour period.
- (1) Calendar date.
- (2) The average SO2 and NOx emission rates (ng/J, lb/mmBTU, or lb/MWh) for each 30-successive boiler operating days, ending with the last 30-day period in the guarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
- (3) [N/A THE STEAM GENERATING UNITS ARE EACH NOT EQUIPPED WITH SO2 EMISSION CONTROLS NOR UNDERGO FUEL PRETREATMENT; THEY ARE EACH SUBJECT TO THE 40 CFR §60.43Da(b)(2) SO2 EMISSION LIMIT WHICH REQUIRES 0% REDUCTION OF THE POTENTIAL COMBUSTION CONCENTRATION]
- (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75% of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
- (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, or malfunction.
- (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (7) Identification of times when hourly averages have been obtained based on manual sampling methods.
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
- (9) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.





- (c) If the minimum quantity of emission data as required by 40 CFR §60.49Da is not obtained for any 30-successive boiler operating days, the following information obtained under the requirements of 40 CFR §60.48Da(h) is reported to the Administrator for that 30-day period:
- (1) The number of hourly averages available for outlet emission rates (no) and inlet emission rates (ni) as applicable.
- (2) The standard deviation of hourly averages for outlet emission rates (so) and inlet emission rates (si) as applicable.
- (3) The lower confidence limit for the mean outlet emission rate (Eo*) and the upper confidence limit for the mean inlet emission rate (Ei*) as applicable.
- (4) The applicable potential combustion concentration.
- (5) The ratio of the upper confidence limit for the mean outlet emission rate (Eo*) and the allowable emission rate (Estd) as applicable.
- (d) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE THE OPACITY LIMITS OF 40 CFR §60.42Da(b) ARE NOT APPLICABLE PURSUANT TO 40 CFR §60.42Da(b)(2)]
- (e) [N/A THE STEAM GENERATING UNITS EACH DO NOT UNDERGO FUEL PRETREATMENT; THEY ARE EACH SUBJECT TO THE 40 CFR $\S60.43Da(b)(2)$ SO2 EMISSION LIMIT WHICH REQUIRES 0% REDUCTION OF THE POTENTIAL COMBUSTION CONCENTRATION]
- (f) For any periods for which opacity, SO2 or NOx emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
- (g) [Reserved]
- (h) The owner or operator of the affected facility shall submit a signed statement indicating whether:
- (1) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and is representative of plant performance.
- (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (4) Compliance with the standards has or has not been achieved during the reporting period.
- (i) [N/A THE STEAM GENERATING UNITS EACH CURRENTLY COMBUSTS NATURAL GAS ONLY; THEREFORE THE OPACITY LIMITS OF 40 CFR §60.42Da(b) ARE NOT APPLICABLE PURSUANT TO 40 CFR §60.42Da(b)(2)]
- (j) The owner or operator of an affected facility shall submit the written reports required under this operating permit condition [40 CFR §60.51Da] and Subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. [i.e., THE REPORT FOR JANUARY 1 THROUGH JUNE 30 SHALL BE POSTMARKED BY JULY 30; THE REPORT FOR JULY 1 THROUGH DECEMBER 31 SHALL BE POSTMARKED BY JANUARY 30]
- (k) The owner or operator of an affected facility may submit electronic quarterly reports for SO2 and/or NOx and/or opacity in lieu of submitting the written reports required under 40 CFR §60.51Da(b) and (i), above. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or







operator, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60, Subpart Da, was achieved during the reporting period. [i.e., THE REPORT FOR JANUARY 1 THROUGH MARCH 31 SHALL BE SUBMITTED BY APRIL 30; THE REPORT FOR APRIL 1 THROUGH JUNE 30 SHALL BE SUBMITTED BY JULY 30; THE REPORT FOR JULY 1 THROUGH SEPTEMBER 30 SHALL BE SUBMITTED BY OCTOBER 30; AND THE REPORT FOR OCTOBER 1 THROUGH DECEMBER 31 SHALL BE SUBMITTED BY JANUARY 30 OF THE FOLLOWING YEAR]

[72 FR 32722, June 13, 2007, as amended at 74 FR 5083, Jan. 28, 2009; 77 FR 9458, Feb. 16, 2012]

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

008 [25 Pa. Code §127.512]

Operating permit terms and conditions.

In the event that 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units (NSPS Subpart Da) is revised, the permittee shall comply with the revised version of NSPS Subpart Da, and shall not be required to comply with any provisions in this operating permit designated as having NSPS Subpart Da as their authority, to the extent that such operating permit provisions would be inconsistent with the applicable provisions of the revised NSPS Subpart Da.

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

Address.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029]

The Group SG06 turbines are subject to 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units. The permittee shall comply with all applicable standards, compliance provisions, performance test, monitoring, record keeping, and reporting requirements contained at 40 CFR §§60.40Da through 60.52Da, including all applicable portions of 40 CFR Part 60, Subpart A - General Provisions. The permittee shall comply with 40 CFR §60.4, which requires submission of copies of all requests, reports, applications, submittals, and other communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. 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 Department copies shall be forwarded to:

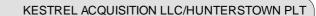
Regional Air Program Manager PA Department of Environmental Protection 909 Elmerton Avenue Harrisburg, PA 17110-8200

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40Da]

Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978

Applicability and designation of affected facility.

- (a) Except as specified in 40 CFR §60.40Da(e), below, the affected facility to which 40 CFR Part 60, Subpart Da, applies is each electric utility steam generating unit:
- (1) That is capable of combusting more than 73 megawatts (MW) (250 million British thermal units per hour (mmBTU/hr)) heat input of fossil fuel (either alone or in combination with any other fuel); and
- (2) For which construction, modification, or reconstruction is commenced after September 18, 1978.





01-05029

- (b) [N/A THE STEAM GENERATING UNITS ARE NOT IGCC STEAM GENERATING UNITS]
- (c) Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels, shall not bring that unit under the applicability of 40 CFR Part 60, Subpart Da.
- (d) Any change to an existing steam generating unit originally designed to fire gaseous or liquid fossil fuels, to accommodate the use of any other fuel (fossil or nonfossil) shall not bring that unit under the applicability of 40 CFR Part 60, Subpart Da.
- (e) Applicability of 40 CFR Part 60, Subpart Da, to an electric utility combined cycle gas turbine other than an IGCC electric utility steam generating unit is as specified in 40 CFR §60.40Da(e)(1) through (3), below.
- (1) Affected facilities (i.e., heat recovery steam generators used with duct burners) associated with a stationary combustion turbine that are capable of combusting more than 73 MW (250 mmBTU/hr) heat input of fossil fuel are subject to 40 CFR Part 60, Subpart Da, except in cases when the affected facility (i.e., heat recovery steam generator) meets the applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.
- (2) For heat recovery steam generators used with duct burners subject to 40 CFR Part 60, Subpart Da, only emissions resulting from the combustion of fuels in the steam generating unit (i.e., duct burners) are subject to the standards under this 40 CFR Part 60, Subpart Da. The emissions resulting from the combustion of fuels in the stationary combustion turbine engine are subject to 40 CFR Part 60, Subpart GG or KKKK, as applicable.
- (3) Any affected facility that meets the applicability requirements and is subject to 40 CFR Part 60, Subpart Eb, or 40 CFR Part 60, Subpart CCCC, is not subject to the emission standards under 40 CFR Part 60, Subpart Da.

[72 FR 32722, June 13, 2007, as amended at 74 FR 5078, Jan. 28, 2009; 77 FR 9448, Feb. 16, 2012]

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41Da]
Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978
Definitions.

Terms used in 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units, as well as Section E, Group SG06, are defined in the Clean Air Act; in 40 CFR §60.2 (General Provisions); and in 40 CFR §60.41a.

 $[72 \, FR \, 32722, June \, 13, 2007, as amended at 74 \, FR \, 5079, Jan. \, 28, 2009; \, 77 \, FR \, 9448, Feb. \, 16, 2012; \, 77 \, FR \, 23402, Apr. \, 19, 2012; \, 78 \, FR \, 24082, Apr. \, 24, 2013]$

*** Permit Shield in Effect. ***



01-05029



SECTION E. Source Group Restrictions.

Group Name: SG07

Group Description: SOURCES SUBJECT TO CEMS REQUIREMENTS

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

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 §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029]

(a) The following continuous emission monitoring systems (CEMS) and components must be 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 the Quality Assurance requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001).

(1) NOx CEMS

- (a) Source Combination to be Monitored: Source IDs 101, 201 and 301 (separately)
- (b) Parameter to be Reported: NOx
- (c) Units of Measurement to be Reported: ppm
- (d) Moisture Basis of Measurement to be Reported: dry volume
- (e) Correction basis of Measurements to be Reported: 15% O2
- (f) Data Substitution Required: No
- (g) Emission Standard: see Group SG01, Condition #003(a)
- (h) Averaging Period: 1-hour block average

(2) NOx CEMS

- (a) Source Combination to be Monitored: Source IDs 101, 201 and 301 (separately)
- (b) Parameter to be Reported: NOx
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported: N/A
- (e) Correction basis of Measurements to be Reported: N/A
- (f) Data Substitution Required: No
- (g) Emission Standard: see Group SG01, Condition #002
- (h) Averaging Period: 1-hour block average

(3) CO CEMS

- (a) Source Combination to be Monitored: Source IDs 101, 201 and 301 (separately)
- (b) Parameter to be Reported: CO
- (c) Units of Measurement to be Reported: ppm
- (d) Moisture Basis of Measurement to be Reported: dry volume
- (e) Correction basis of Measurements to be Reported: 15% O2
- (f) Data Substitution Required: No







- (g) Emission Standard: see Group SG01, Condition #006(a)
- (h) Averaging Period: 1-hour block average

(4) CO CEMS

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- (a) Source Combination to be Monitored: Source IDs 101, 201 and 301 (separately)
- (b) Parameter to be Reported: CO
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported: N/A
- (e) Correction basis of Measurements to be Reported: N/A
- (f) Data Substitution Required: No
- (g) Emission Standard: see Group SG01, Condition #002
- (h) Averaging Period: 1-hour block average

(5) O2 CEMS

- (a) Source Combination to be Monitored: Source IDs 101, 201 and 301 (separately)
- (b) Parameter to be Reported: O2
- (c) Units of Measurement to be Reported: percent (%)
- (d) Moisture Basis of Measurement to be Reported: N/A
- (e) Correction basis of Measurements to be Reported: N/A
- (f).Data Substitution Required: No (g) Emission Standard: N/A (h) Averaging Period: N/A
- (b) Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with this operating permit condition.

002 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) In accordance with 25 Pa. Code §139.101(12), continuous emission monitoring for CO and NOx shall, at a minimum, meet one of the following data availability requirements for each standard/averaging period combination:
- (1) In each calendar month, at least 90% of the time periods for which each emission standard 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
- (2) 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).
- (b) Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with this operating permit condition.

[25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029]

The permittee shall maintain fuel flow meters for each Group SG01 combustion turbines 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 stack exhaust flow monitoring to allow for calculation of pollutant mass emission rates.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

(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) Records shall be retained for at least five (5) years and shall be made 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 operating permit condition.

V. REPORTING REQUIREMENTS.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

[Additional authority for this permit condition is also derived from Plan Approval No. 01-05029]

- a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the Record Keeping and Reporting requirements as established in Revision No. 8 of the 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) Quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter (i.e., the report for January 1 through March 31 shall be submitted by April 30; the report for April 1 through June 30 shall be submitted by July 30; the report for July 1 through September 30 shall be submitted by October 30; and the report for October 1 through December 31 shall be submitted by January 30 of the following year).
- (d) Failure to submit required reports of continuous emission monitoring within the time periods specified in part (c), above, unless approved in advance by the Department in writing, shall constitute violations of this operating permit.
- (e) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this operating permit condition.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***







Group Name: SG08

Group Description: SOURCES SUBJECT TO CROSS-STATE AIR POLLUTION RULE (CSAPR) REQUIREMENTS

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

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 §127.511]

Monitoring and related recordkeeping and reporting requirements.

Description of Tranport 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 and TR SO2 Group 1 Trading Program.

UNIT 101 - COMBUSTION TURBINE 101, UNIT 201 - COMBUSTION TURBINE 201 AND UNIT 301 - COMBUSTION TURBINE 301:

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), 40 CFR §§97.630 through 97.635 (CSAPR SO2 Group 1 Trading Program), and 40 CFR §§97.830 through 97.835 (CSAPR NOx Ozone Season 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 U.S. 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), 40 CFR §97.635 (CSAPR SO2 Group 1 Trading Program), and 40 CFR §97.835 (CSAPR NOX Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on U.S. 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), 40 CFR §§97.630 through 97.634 (CSAPR SO2 Group 1 Trading Program), and 40 CFR §§97.830 through 97.834 (CSAPR NOx Ozone Season Group 2 Trading Program),



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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), 40 CFR §97.635 (CSAPR SO2 Group 1 Trading Program), and 40 CFR §97.835 (CSAPR NOx Ozone Season 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 U.S. 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 NOx Annual Trading Program), 40 CFR §§97.630 through 97.634 (CSAPR SO2 Group 1 Trading Program), and 40 CFR §§97.830 through 97.834 (CSAPR NOx Ozone Season Group 2 Trading Program), and therefore minor operating permit modification procedures, in accordance with 40 CFR §70.7(e)(2)(i)(B) or 40 CFR §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 §127.512]

Operating permit terms and conditions.

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

(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 40 CFR §§97.413 through 97.418.

- (b) Emissions monitoring, reporting, and recordkeeping requirements.
- (1) The owners and operators, and the designated representative, of each TR NOx Annual source and each TR NOx Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR §§97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR §§97.430 through 97.435 shall be used to calculate allocations of TR NOx Annual allowances under 40 CFR §§97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NOx Annual emissions limitation and assurance provisions under paragraph (c), below, 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 40 CFR §§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.
- (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 40 CFR §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), above, 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 40 CFR §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 40 CFR Part 97, Subpart AAAAA 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 the 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 40 CFR §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 40 CFR §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 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 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) above, 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 the 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 40 CFR §97.410(a) and the state's variability limit under 40 CFR §97.410(b).
- (iv) It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NOx emissions from all TR NOx Annual units at TR NOx Annual sources in the 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 the 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), above,
- (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 Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii), above, and each day of such control period shall constitute a separate violation of 40 CFR



Part 97, Subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

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- (i) A TR NOx Annual unit shall be subject to the requirements under paragraph (c)(1), above, for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR §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), above, for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §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), above, 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), above, 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 40 CFR Part 97, Subpart AAAAA.
- (6) Limited authorization. ATR 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 40 CFR Part 97, 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 revision requirements.
- (1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOx Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 40 CFR §§97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
- (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 40 CFR §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 40 CFR §97.416 changing the designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.
- (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 40 CFR §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 40 CFR Parts 70 and 71.
- (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 40 CFR §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.

Transport Rule (TR) NOx Ozone Season Group 2 Trading Program Requirements (40 CFR §97.806)

(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 40 §§CFR 97.813 through 97.818.

- (b) Emissions monitoring, reporting, and recordkeeping requirements.
- (1) The owners and operators, and the designated representative, of each TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR §§97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR §§97.830 through 97.835 shall be used to calculate allocations of TR NOx Ozone Season Group 2 allowances under 40 CFR §§97.811(a)(2) and (b) and 97.812 and to determine compliance with the TR NOx Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c), below, 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 40 CFR §§97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

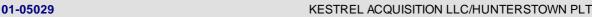
- (c) NOx emissions requirements.
- (1) TR NOx Ozone Season Group 2 emissions limitation.
- (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, TR NOx Ozone Season allowances available for deduction for such control period under 40 CFR §97.824(a) in an amount not less than the tons of total NOx emissions for such control period from all TR NOx Ozone Season Group 2 units at the source.
- (ii) If total NOx emissions during a control period in a given year from the TR NOx Ozone Season Group 2 units at a TR NOx Ozone Season Group 2 source are in excess of the TR NOx Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i), above, then:
- (A) The owners and operators of the source and each TR NOx Ozone Season Group 2 unit at the source shall hold the TR NOx Ozone Season Group 2 allowances required for deduction under 40 CFR §97.824(d); and
- (B) The owners and operators of the source and each TR NOx Ozone Season Group 2 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 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (2) TR NOx Ozone Season Group 2 assurance provisions.
- (i) If total NOx emissions during a control period in a given year from all TR NOx Ozone Season Group 2 units at TR NOx Ozone Season Group 2 sources in the 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 Group 2 allowances available for deduction for such control period under 40 CFR §97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR §97.825(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 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 Group 2 units at TR NOx Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (ii) The owners and operators shall hold the TR NOx Ozone Season Group 2 allowances required under paragraph (c)(2)(i), above, 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 Group 2 units at TR NOx Ozone Season Group 2 sources in the 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 Group 2 trading budget under 40 CFR §97.810(a) and the state's variability limit under 40 CFR §97.810(b).
- (iv) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NOx emissions from all TR NOx Ozone Season Group 2 units at TR NOx Ozone Season Group 2 sources in the 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 Group 2 units at TR NOx Ozone Season Group 2 sources in the 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 Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii), above:
- (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 Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii), above, and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (3) Compliance periods.
- (i) ATR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1), above, for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §97.830(b) and for each control period thereafter.
- (ii) A TR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2), above, for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i) A TR NOx Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i), above, for a control period in a given year must be a TR NOx Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
- (ii) A TR NOx Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii), above, for a control period in a given year must be a TR NOx Ozone Season Group 2 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 Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (6) Limited authorization. ATR NOx Ozone Season Group 2 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 Group 2 Trading Program; and
- (ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, 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. ATR NOx Ozone Season Group 2 allowance does not constitute a property right.
- (d) Title V permit revision requirements.
- (1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOx Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass





emissions excepted monitoring methodology (pursuant to 40 CFR §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 40 CFR §§97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

- (e) Additional recordkeeping and reporting requirements.
- (1) Unless otherwise provided, the owners and operators of each TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 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 40 CFR §97.816 for the designated representative for the source and each TR NOx Ozone Season Group 2 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 40 CFR §97.816 changing the designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
- (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 Group 2 Trading Program.
- (2) The designated representative of a TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 unit at the source shall make all submissions required under the TR NOx Ozone Season Group 2 Trading Program, except as provided in 40 CFR §97.818. 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 40 CFR Parts 70 and 71.
- (f) Liability.
- (1) Any provision of the TR NOx Ozone Season Group 2 Trading Program that applies to a TR NOx Ozone Season Group 2 source or the designated representative of a TR NOx Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the TR NOx Ozone Season Group 2 units at the source.
- (2) Any provision of the TR NOx Ozone Season Group 2 Trading Program that applies to a TR NOx Ozone Season Group 2 unit or the designated representative of a TR NOx Ozone Season Group 2 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 Group 2 Trading Program or exemption under 40 CFR §97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOx Ozone Season Group 2 source or TR NOx Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

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

(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 40 CFR §§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 40 CFR §§97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

- (2) The emissions data determined in accordance with 40 CFR §§97.630 through 97.635 shall be used to calculate allocations of TR SO2 Group 1 allowances under 40 CFR §§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), below, 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 40 CFR §§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 40 CFR §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), above, 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 40 CFR §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 40 CFR Part 97, Subpart CCCCC 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 the 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 40 CFR §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 40 CFR §97.625(b), of multiplying:
- (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 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 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), above, 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 the 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 40 CFR §97.610(a) and the state's variability limit under 40 CFR §97.610(b).
- (iv) It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO2 emissions from all TR SO2 Group 1 units at TR SO2 Group 1 sources in the 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 the 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), above:
- (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), above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC 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), above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §97.630(b) and for each control period thereafter.
- (ii) ATR SO2 Group 1 unit shall be subject to the requirements under paragraph (c)(2), above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §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), above 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), above, 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 40 CFR Part 97, Subpart CCCCC.
- (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
- (ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, 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. ATR SO2 Group 1 allowance does not constitute a property right.
- (d) Title V permit revision requirements.





- (1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO2 Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR Part 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 40 CFR §§97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
- (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 40 CFR §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 40 CFR §97.616 changing the designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.
- (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 40 CFR §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 40 CFR Parts 70 and 71.
- (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 40 CFR §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 (SIP), a federally enforceable permit, or the Clean Air Act.

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

- (a) The Group SG08 combustion turbines are 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, EEEEE and CCCCC (relating to TR NOx Annual trading program; TR NOx Ozone Season Group 2 trading program; and TR SO2 Group 1 trading







program).

004 [25 Pa. Code §127.512]

Operating permit terms and conditions.

In the event that 40 CFR 97 Subpart(s) are revised, the permittee shall comply with the revised version of the subpart(s), 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. ***



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SECTION E. Source Group Restrictions.

Group Name: SG09

Group Description: EMERGENCY CI ENGINES SUBJECT TO MACT SUBPART ZZZZ

Sources included in this group

ID	Name
501	EMERGENCY DIESEL FIRE PUMP
502	EMERGENCY DIESEL-FIRED GENERATOR

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 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?

40 CFR §63.6585 Am I subject to 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (MACT Subpart ZZZZ)?

You are subject to MACT Subpart ZZZZ 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.

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR §1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) A major source of HAP emissions is a plant site that emits or has the potential to emit (PTE) any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAPs at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- (c) An area source of HAP emissions is a source that is not a major source. [NOTE: THE FACILITY IS AN AREA SOURCE





OF HAP EMISSIONS PURSUANT TO 40 CFR §§63.2 AND 63.6585(b)]

- (d) If you are an owner or operator of an area source subject to MACT Subpart ZZZZ, your status as an entity subject to a standard or other requirements under MACT Subpart ZZZZ does not subject you to the obligation to obtain a permit under 40 CFR Part 70 or 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 MACT Subpart ZZZZ. Notwithstanding the previous sentence, you must continue to comply with the provisions of MACT Subpart ZZZZ as applicable.
- (e) [N/A NOT USED FOR NATIONAL SECURITY PURPOSES]
- (f) [N/A RICE NOT RESIDENTIAL, COMMERCIAL OR INSTITUTIONAL]
- [69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]
- 40 CFR §63.6590 What parts of my plant does MACT Subpart ZZZZ cover?
- MACT Subpart ZZZZ applies to each affected source.
- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- (1) Existing stationary RICE.
- (i) [N/A NOT A MAJOR HAP SOURCE]
- (ii) [N/A NOT A MAJOR HAP SOURCE]
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
- (2) New stationary RICE.
- (i) [N/A NOT A MAJOR HAP SOURCE]
- (ii) [N/A NOT A MAJOR HAP SOURCE]
- (iii) [N/A NOT A NEW SOURCE]
- (3) [N/A NOT A RECONSTRUCTED SOURCE]
- (b) Stationary RICE subject to limited requirements.
- (1) An affected source which meets either of the criteria in 40 CFR §63.6590(b)(1)(i) through (ii), below, does not have to meet the requirements of MACT Subpart ZZZZ and of 40 CFR Part 63, Subpart A (General Provisions), except for the initial notification requirements of 40 CFR §63.6645(f).
 - (i) [N/A NOT A MAJOR HAP SOURCE]
 - (ii) [N/A NOT A MAJOR HAP SOURCE]
- (2) [N/A NOT A MAJOR HAP SOURCE AND DOES NOT COMBUST LFG]
- (3) The following stationary RICE do not have to meet the requirements of MACT Subpart ZZZZ and of 40 CFR Part 63,





Subpart A (General Provisions), including initial notification requirements:

- (i) [N/A NOT A MAJOR HAP SOURCE]
- (ii) [N/A NOT A MAJOR HAP SOURCE]
- (iii) [N/A NOT A MAJOR HAP SOURCE]
- (iv) [N/A NOT A MAJOR HAP SOURCE]
- (v) [N/A NOT A MAJOR HAP SOURCE AND DOES NOT COMBUST LFG]
- (c) [N/A NOT SUBJECT TO NSPS SUBPARTS IIII OR JJJJ]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

- 40 CFR §63.6595 When do I have to comply with MACT Subpart ZZZZ?
- (a) Affected sources.
- (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013. [NOTE: EACH ENGINE IS AN EXISTING STATIONARY CI RICE LOCATED AT AN AREA SOURCE OF HAP EMISSIONS; THEREFORE, EACH ENGINE MUST COMPLY WITH THE APPLICABLE EMISSION LIMITATIONS, OPERATING LIMITATIONS, AND OTHER REQUIREMENTS NO LATER THAN MAY 3, 2013]
- (2) [N/A NOT A MAJOR HAP SOURCE]
- (3) [N/A NOT A MAJOR HAP SOURCE]
- (4) [N/A NOT A MAJOR HAP SOURCE]
- (5) [N/A NOT A MAJOR HAP SOURCE]
- (6) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (7) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit (PTE) such that it becomes a major source of HAP emissions, the compliance dates in 40 CFR §63.6595(b)(1) and (2), below, apply to you.
- (1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP emissions must be in compliance with MACT Subpart ZZZZ upon startup of your affected source.
- (2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major





source of HAP emissions must be in compliance with the provisions of MACT Subpart ZZZZ that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP emissions.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in 40 CFR §63.6645 and in 40 CFR Part 63, Subpart A (General Provisions).

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

Emission and Operating Limitations

40 CFR §63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

[N/A - NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS; EACH RICE SITE RATING IS EQUAL TO OR LESS THAN 500 BHP; NOT A MAJOR HAP SOURCE]

40 CFR §63,6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

IN/A - NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS; EACH RICE IS AN EXISTING RICE; NOT A MAJOR HAP SOURCE]

40 CFR §63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

[N/A - NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS; NOT A MAJOR HAP SOURCE]

40 CFR §63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in MACT Subpart ZZZZ is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR §63.6620 and Table 4 to MACT Subpart ZZZZ. [N/A - NO NUMERICAL EMISSION LIMITS]

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to MACT Subpart ZZZZ and the operating limitations in Table 2b to MACT Subpart ZZZZ that apply to you. [NOTE: THE TABLE 2d REQUIREMENTS ARE APPLICABLE; HOWEVER, THE TABLE 2b OPERATING LIMITATIONS ARE NOT APPLICABLE]

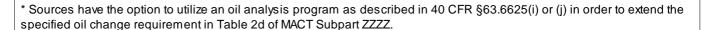
TABLE 2d REQUIREMENTS:

Subcategory 4: For each emergency stationary CI RICE and black start stationary CI RICE**, you must meet the following requirement, except during periods of startup:

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



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** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of MACT Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

[END OF TABLE 2d REQUIREMENTS]

- (b) [N/A EMERGENCY ENGINES]
- (c) [N/A EMERGENCY ENGINES]
- (d) [N/A EMERGENCY ENGINES]
- (e) [N/A EMERGENCY ENGINES]
- (f) [N/A EMERGENCY ENGINES]

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

40 CFR §63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

- (a) [N/A EMERGENCY ENGINES]
- (b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [NOTE: EACH ENGINE IS AN EXISTING EMERGENCY CI STATIONARY RICE WITH A SITE RATING OF MORE THAN 100 BRAKE HP AND A DISPLACEMENT OF LESS THAN 30 LITERS PER CYLINDER THAT USES DIESEL FUEL; ALSO, 40 CFR §63.6640(f)(2)(ii)&(iii) WERE VACATED AS OF MAY 2, 2016 PER COURT ORDER]
- (c) [N/A NOT A MAJOR SOURCE]
- (d) [N/A NOT IN SPECIFIED GEOGRAPHIC LOCATIONS]

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

40 CFR §63.6605 What are my general requirements for complying with MACT Subpart ZZZZ?



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

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

Testing and Initial Compliance Requirements

40 CFR §63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

 $[N/A-NO\ PERFORMANCE\ TESTING\ REQUIRED;\ EACH\ RICE\ SITE\ RATING\ IS\ EQUAL\ TO\ OR\ LESS\ THAN\ 500\ BHP;\ NOT\ A\ MAJOR\ HAP\ SOURCE]$

40 CFR §63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

[N/A - NO PERFORMANCE TESTING REQUIRED; EACH RICE IS AN EXISTING RICE; NOT A MAJOR HAP SOURCE]

40 CFR §63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

[N/A - NO PERFORMANCE TESTING REQUIRED]

40 CFR §63.6615 When must I conduct subsequent performance tests?

[N/A – NO PERFORMANCE TESTING REQUIRED]

40 CFR §63.6620 What performance tests and other procedures must I use?

[N/A - NO PERFORMANCE TESTING REQUIRED]

40 CFR §63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

- (a) [N/A CEMS NOT REQUIRED]
- (b) [N/A CPMS NOT REQUIRED]
- (c) [N/A LFG NOT USED]
- (d) [N/A NOT A MAJOR HAP SOURCE]



- (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
- (1) [N/A NOT A MAJOR HAP SOURCE]
- (2) [N/A NOT A MAJOR HAP SOURCE]
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
- (4) [N/A EMERGENCY ENGINES]
- (5) [N/A EMERGENCY ENGINES]
- (6) [N/A EMERGENCY ENGINES]
- (7) [N/A EMERGENCY ENGINES]
- (8) [N/A EMERGENCY ENGINES]
- (9) [N/A EMERGENCY ENGINES]
- (10) [N/A EMERGENCY ENGINES]
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. [NOTE: EACH ENGINE IS AN EXISTING EMERGENCY STATIONARY RICE LOCATED AT AN AREA SOURCE OF HAP EMISSIONS]
- (g) [N/A EMERGENCY ENGINES]
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to MACT Subpart ZZZZ apply. [NOTE: TABLE 2d IS THE ONLY APPLICABLE LISTED TABLE; NOT SUBJECT TO EMISSION STANDARDS]
- (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to MACT Subpart ZZZZ or in items 1 or 4 of Table 2d to MACT Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to MACT Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to MACT Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [NOTE: EACH ENGINE IS SUBJECT TO ITEM 4 OF TABLE 2d; TABLE 2d IS THE ONLY APPLICABLE LISTED TABLE]
- (j) [N/A NOT AN SI RICE]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20,



2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

40 CFR §63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

- (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of MACT Subpart ZZZZ. [N/A NONE OF THE CATEGORIES IN TABLE 5 APPLY TO EMERGENCY ENGINES]
- (b) [N/A PERFORMANCE TESTING NOT REQUIRED]
- (c) [N/A NOTIFICATION OF COMPLIANCE STATUS NOT REQUIRED FOR EXISTING EMERGENCY RICE]
- (d) [N/A EMERGENCY ENGINES]
- (e) [N/A EMERGENCY ENGINES]

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

Continuous Compliance Requirements

40 CFR §63.6635 How do I monitor and collect data to demonstrate continuous compliance?

[N/A – NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]

40 CFR §63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to MACT Subpart ZZZZ that apply to you according to methods specified in Table 6 to MACT Subpart ZZZZ. [NOTE: TABLE 2d IS THE ONLY APPLICABLE LISTED TABLE]

TABLE 6 REQUIREMENTS

Item 9: For each existing emergency and black start stationary RICE <= 500 HP located at a major source of HAP emissions, existing non-emergency stationary RICE < 100 HP located at a major source of HAP emissions, existing emergency and black start stationary RICE located at an area source of HAP emissions, existing non-emergency stationary CI RICE <= 300 HP located at an area source of HAP emissions, existing non-emergency 2SLB stationary RICE located at an area source of HAP emissions, existing non-emergency stationary SI RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE <= 500 HP located at an area source of HAP emissions, existing non-emergency 4SLB and 4SRB stationary RICE > 500 HP located at an area source of HAP emissions that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE, complying with the "work or management practices" requirement, you must demonstrate continuous compliance by [NOTE: EACH ENGINE IS AN EXISTING EMERGENCY STATIONARY RICE LOCATED AT AN AREA SOURCE OF HAP EMISSIONS]:

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



[78 FR 6715, Jan. 30, 2013]

[END OF TABLE 6 REQUIREMENTS]

- (b) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (c) [N/A ANNUAL COMPLIANCE DEMONSTRATION NOT REQUIRED]
- (d) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (e) You must also report each instance in which you did not meet the requirements in Table 8 to MACT Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to MACT Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to MACT Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE. [NOTE: EXISTING EMERGENCY RICE AT AN AREA SOURCE OF HAP EMISSIONS ARE NOT AMONG THOSE EXEMPTED FROM THIS PARAGRAPH (i.e., 40 CFR §63.6640(e)]
- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR §63.6640(f)(1) through (4), below. In order for the engine to be considered an emergency stationary RICE under MACT Subpart ZZZZ, 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 40 CFR §63.6640(f)(1) through (4), below, is prohibited. If you do not operate the engine according to the requirements in 40 CFR §63.6640(f)(1) through (4), below, the engine will not be considered an emergency engine under MACT Subpart ZZZZ and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii), below, for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR §63.6640(f)(3) and (4), below, counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2) [i.e., 40 CFR §63.6640(f)(2)].
- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii) [N/A VACATED AS OF MAY 2, 2016 PER COURT ORDER]
 - (iii) [N/A VACATED AS OF MAY 2, 2016 PER COURT ORDER]
 - (3) [N/A NOT A MAJOR HAP SOURCE]
- (4) Emergency stationary RICE located at area sources of HAP emissions 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





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the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR §63.6640(f)(2), above. Except as provided in 40 CFR §63.6640(f)(4)(i) and (ii), below, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (i) [N/A THIS APPLIED TO PRE-MAY 3, 2014]
- (ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

Notifications, Reports, and Records

- 40 CFR §63.6645 What notifications must I submit and when?
- (a) You must submit all of the notifications in 40 CFR §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
- (1) [N/A NOT A MAJOR HAP SOURCE]
- (2) [N/A PURSUANT TO PART (a)(5), BELOW]
- (3) [N/A NOT A MAJOR HAP SOURCE]
- (4) [N/A NOT A MAJOR HAP SOURCE]
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emissions standards. INOTE: EACH ENGINE IS AN EXISTING STATIONARY EMERGENCY RICE; ALSO, EACH ENGINE IS AN EXISTING STATIONARY RICE THAT IS NOT SUBJECT TO ANY NUMERICAL EMISSION STANDARDS]
- (b) [N/A NOT A MAJOR HAP SOURCE]
- (c) [N/A NOT A MAJOR HAP SOURCE]
- (d) [N/A NOT A MAJOR HAP SOURCE]
- (e) [N/A NOT A MAJOR HAP SOURCE]





- (f) [N/A 40 CFR §63.6590(b) DOES NOT APPLY]
- (g) [N/A PERFORMANCE TEST NOT REQUIRED]
- (h) [N/A PERFORMANCE TEST NOT REQUIRED]
- (i) [N/A EMERGENCY ENGINES]

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

40 CFR §63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of MACT Subpart ZZZ that applies to you.

TABLE 7 REQUIREMENTS

Item 4: For each emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in 40 CFR §63.6640(f)(4)(ii), you must submit a report. The report must contain the information in 40 CFR §63.6650(h)(1). You must submit the report annually according to the requirements in 40 CFR §63.6650(h)(2)-(3). [NOTE: 40 CFR §63.6640(f)(2)(ii) AND (iii) WERE VACATED AS OF MAY 2, 2016 PER COURT ORDER]

[78 FR 6719, Jan. 30, 2013]

[END OF TABLE 7 REQUIREMENTS]

- (b) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR §63.10(a), you must submit each report by the date in Table 7 of MACT Subpart ZZZ and according to the requirements in 40 CFR §63.6650(b)(1) through (b)(9), below.
- (1) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (2) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (3) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (4) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (5) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (6) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (7) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (8) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS;





THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]

- (9) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE REQUIRED ACCORDING TO 40 CFR §63.6650(h)]
- (c) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE ONLY REQUIRED TO CONTAIN THE INFORMATION OF 40 CFR §63.6650(h)(1)]
- (d) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE ONLY REQUIRED TO CONTAIN THE INFORMATION OF 40 CFR §63.6650(h)(1)]
- (e) [N/A EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE ONLY REQUIRED TO CONTAIN THE INFORMATION OF 40 CFR §63.6650(h)(1)]
- (f) Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in MACT Subpart ZZZZ in the semiannual monitoring report required by 40 CFR §70.6(a)(3)(iii)(A) or 40 CFR §71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of MACT Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR §70.6(a)(3)(iii)(A) or 40 CFR §71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in MACT Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. INOTE: THE SEMIANNUAL MONITORING REPORT REQUIRED BY "40 CFR §70.6(a)(3)(iii)(A) or 40 CFR §71.6(a)(3)(iii)(A)" REFERS TO THE SEMIANNUAL DEVIATIONS MONITORING REPORTING REQUIREMENT OF SECTION B. CONDITION #025(b), OF TITLE V O.P. No. 01-05029: A MACT SUBPART ZZZZ "COMPLIANCE REPORT" IS NOT REQUIRED TO BE SUBMITTED PURSUANT TO TABLE 7 OF MACT SUBPART ZZZZ SINCE EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THE MACT SUBPART ZZZZ "REPORT" IS ONLY REQUIRED TO BE SUBMITTED PURSUANT TO TABLE 7, ITEM 4, OF MACT SUBPART ZZZZ IN THE EVENT THAT ONE OR MORE GROUP SG09 ENGINE OPERATES OR IS CONTRACTUALLY OBLIGATED TO BE AVAILABLE FOR MORE THAN 15 HOURS PER YEAR FOR THE PURPOSES SPECIFIED IN 40 CFR §63.6640(f)(4)(ii)]]
- (g) [N/A LFG NOT USED; ALSO, EACH ENGINE IS ONLY SUBJECT TO ITEM 4 OF THE TABLE 7 REPORT SUBMITTAL REQUIREMENTS; THEREFORE, ANNUAL REPORT SUBMITTALS ARE ONLY REQUIRED TO CONTAIN THE INFORMATION OF 40 CFR §63.6650(h)(1)]
- (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR §63.6650(h)(1) through (3), below.
- (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) [N/A 40 CFR §63.6640(f)(2)(ii) AND (iii) WERE VACATED AS OF MAY 2, 2016 PER COURT ORDER]
- (vi) [N/A 40 CFR §63.6640(f)(2)(ii) AND (iii) WERE VACATED AS OF MAY 2, 2016 PER COURT ORDER]



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- (vii) Hours spent for operation for the purpose specified in 40 CFR §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (viii) If there were no deviations from the fuel requirements in 40 CFR §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
- (ix) If there were deviations from the fuel requirements in 40 CFR §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
- (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 MACT Subpart ZZZZ-specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through U.S. EPA's Central Data Exchange (CDX) [www.epa.gov/cdx]. However, if the reporting form specific to MACT Subpart ZZZZ 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 40 CFR §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

- 40 CFR §63.6655 What records must I keep?
- (a) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (b) [N/A NO CEMS OR CPMS]
- (c) [N/A LFG NOT COMBUSTED]
- (d) [N/A NOT SUBJECT TO EMISSION OR OPERATING LIMITATIONS]
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
- (1) [N/A NOT A MAJOR HAP SOURCE]
- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to MACT Subpart ZZZZ.
- (f) If you own or operate any of the stationary RICE in 40 CFR §63.6655(f)(1) through (2), below, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or 40 CFR §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- (1) [N/A NOT A MAJOR HAP SOURCE]
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]





40 CFR §63.6660 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
- (b) As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

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

Other Requirements and Information

40 CFR §63.6665 What parts of the General Provisions apply to me?

Table 8 to MACT Subpart ZZZZ shows which parts of the General Provisions in 40 CFR §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE. [NOTE: EXISTING EMERGENCY RICE AT AREA HAP SOURCES ARE NOT AMONG THOSE EXEMPTED FROM THIS SECTION (40 CFR §63.6665)]

[75 FR 9678, Mar. 3, 2010]

The Group SG09 engines are subject to 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (MACT Subpart ZZZZ). The permittee shall comply with all applicable standards, compliance provisions, performance test, monitoring, recordkeeping, and reporting requirements of MACT Subpart ZZZZ, including all applicable portions of 40 CFR Part 63, Subpart A (General Provisions). The permittee shall comply with 40 CFR §63.13(a), which requires submission of copies of all requests, reports, applications, submittals, and other communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. 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 Department copies shall be forwarded to:

Regional Air Program Manager
PA Department of Environmental Protection
Air Quality Program
909 Elmerton Avenue







Harrisburg, PA 17110-8200	
Pogulaton/Changes:	
Regulatory Changes:	

In the event that MACT Subpart ZZZZ is revised by U.S. EPA, the permittee shall comply with the revised version of MACT Subpart ZZZZ, and shall not be required to comply with any provisions in this operating permit designated as having MACT Subpart ZZZZ as their authority, to the extent that such operating permit provisions would be inconsistent with the applicable provisions of the revised version of MACT Subpart ZZZZ.

*** Permit Shield in Effect. ***







Group Name: SG11

Group Description: COMBINED CYCLE COMBUSTION TURBINES SUBJECT TO PRESUMPTIVE RACT 2

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §129.97]

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

- 25 Pa. Code §129.97 Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.
- (a) The owner and operator of a source listed in one or more of parts (b)-(h), below, located at a major NOx-emitting facility or major VOC-emitting facility subject to 25 Pa. Code §129.96 (relating to applicability) shall comply with the applicable presumptive RACT requirement or RACT emission limitation, or both, beginning with the specified compliance date as follows, unless an alternative compliance schedule is submitted and approved under parts (k)-(m) or 25 Pa. Code §129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule):
- (1) January 1, 2017, for a source subject to 25 Pa. Code §129.96(a).
- (2) [N/A THE GROUP SG11 TURBINES ARE NOT SUBJECT TO 25 Pa. Code §129.96(b)]
- (b) The owner and operator of a source specified in this part (25 Pa. Code §129.97(b)), which is located at a major NOx-emitting facility or major VOC-emitting facility subject to 25 Pa. Code §129.96 shall comply with the following:
- (1) [N/A THE GROUP SG11 TURBINES ARE NOT COMBUSTION UNITS]
- (2) [N/A THE GROUP SG11 TURBINES ARE NOT COMBUSTION UNITS]
- (3) The applicable recordkeeping requirements of 25 Pa. Code §129.100(d), (e) or (f) (relating to compliance demonstration and recordkeeping requirements).
- (c) [N/A THE GROUP SG11 TURBINES DO NOT SATISFY ANY OF THE CATEGORIES SPECIFIED IN PARTS (1)-(8) OF THIS SUBSECTION (25 Pa. Code §129.97(c))]
- (d) Except as specified under part (c), above, the owner and operator of a combustion unit or other combustion source located at a major VOC-emitting facility subject to 25 Pa. Code §129.96 shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions from the combustion unit or other combustion source.
- (e) [N/A THE FACILITY IS NOT A MUNICIPAL SOLID WASTE LANDFILL]
- (f) [N/A THE GROUP SG11 TURBINES ARE NOT MUNICIPAL WASTE COMBUSTORS]
- (g) Except as specified under part (c), above, the owner and operator of a NOx air contamination source specified in this part (25 Pa. Code §129.97(g)), which is located at a major NOx-emitting facility or a VOC air contamination source specified in this part (25 Pa. Code §129.97(g)), which is located at a major VOC-emitting facility subject to 25 Pa. Code §129.96 may not cause, allow or permit NOx or VOCs to be emitted from the air contamination source in excess of the applicable presumptive RACT emission limitation:
- (1) [N/A THE GROUP SG11 TURBINES ARE NOT COMBUSTION UNITS OR PROCESS HEATERS]
- (2) A combustion turbine:







- (i) [N/A THE GROUP SG11 TURBINES EACH HAVE A RATED OUTPUT EQUAL TO OR GREATER THAN 180 MW]
- (ii) For a combined cycle or combined heat and power combustion turbine with a rated output equal to or greater than 180 MW when firing:
- (A) Natural gas or a noncommercial gaseous fuel, 4 ppmvd NOx @ 15% oxygen. [NOTE: EXCEPT DURING PERIODS OF GROUP SG11 TURBINE OPERATION BELOW 44% LOAD, THIS NOX EMISSION LIMIT IS SUPERSEDED BY THE NOX EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(a), THAT WAS ESTABLISHED AS PART OF LAER]
 - (B) [N/A THE GROUP SG11 TURBINES DO NOT FIRE FUEL OIL]
- (C) Natural gas or a noncommercial gaseous fuel, 2 ppmvd VOC (as propane) @ 15% oxygen. [NOTE: EXCEPT DURING PERIODS OF GROUP SG11 TURBINE OPERATION BELOW 44% LOAD, THIS VOC EMISSION LIMIT IS SUPERSEDED BY THE VOC EMISSION LIMIT OF SECTION E (GROUP SG01), CONDITION #003(b), THAT WAS ESTABLISHED AS PART OF LAER]
 - (D) [N/A THE GROUP SG11 TURBINES DO NOT FIRE FUEL OIL]
 - (iii) [N/A THE GROUP SG11 TURBINES ARE COMBINED CYCLE COMBUSTION TURBINES]
 - (iv) [N/A THE GROUP SG11 TURBINES ARE COMBINED CYCLE COMBUSTION TURBINES]
- (3) [N/A THE GROUP SG11 TURBINES ARE NOT STATIONARY INTERNAL COMBUSTION ENGINES]
- (4) [N/A THE GROUP SG11 TURBINES DO NOT FIRE MULTIPLE FUELS]
- (h) [N/A THE GROUP SG11 TURBINES ARE NOT PORTLAND CEMENT KILNS]
- (i) [N/A THE GROUP SG11 TURBINES WERE NEVER THE SUBJECT OF A PREVIOUSLY ISSUED RACT OPERATING PERMIT]
- (j) [N/A THE GROUP SG11 TURBINES ARE NOT SUBJECT TO THE REQUIREMENTS AND EMISSION LIMITATIONS OF 25 Pa. Code §§129.201-129.205, 145.111-145.113 and 145.141-145.146]
- (k) [N/A AN ALTERNATIVE COMPLIANCE SCHEDULE IS NOT REQUIRED]
- (I) [N/A AN ALTERNATIVE COMPLIANCE SCHEDULE IS NOT REQUIRED]
- (m) [N/A AN ALTERNATIVE COMPLIANCE SCHEDULE IS NOT REQUIRED]

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 §129.100]

Compliance demonstration and recordkeeping requirements.

25 Pa. Code §129.100 - Compliance demonstration and recordkeeping requirements.

(a) Except as provided in part (c), below, the owner and operator of an air contamination source subject to a NOx requirement or RACT emission limitation or VOC requirement or RACT emission limitation, or both, listed in 25 Pa. Code



§129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation by performing the following monitoring or testing procedures:

- (1) For an air contamination source with a CEMS, monitoring and testing in accordance with the requirements of Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) using a 30-day rolling average, except municipal waste combustors. [NOTE: THE GROUP SG11 TURBINES ARE EACH EQUIPPED WITH NOX CEMS; HOWEVER, THE GROUP SG11 TURBINES ARE EACH NOT EQUIPPED WITH VOC CEMS]
 - (i) [N/A THE GROUP SG11 TURBINES ARE NOT COMBUSTION UNITS]
- (ii) A 30-day rolling average emission rate for each applicable RACT emission limitation shall be calculated for an affected air contamination source for each consecutive operating day.
- (iii) Each 30-day rolling average emission rate for an affected air contamination source must include the emissions that occur during the entire operating day, including emissions from startups, shutdowns and malfunctions.
- (2) [N/A THE GROUP SG11 TURBINES ARE NOT PORTLAND CEMENT KILNS]
- (3) [N/A THE GROUP SG11 TURBINES ARE NOT MUNICIPAL WASTE COMBUSTORS]
- (4) For an air contamination source without a CEMS, monitoring and testing in accordance with a Department-approved emissions source test that meets the requirements of Chapter 139, Subchapter A (relating to sampling and testing methods and procedures). The source test shall be conducted one time in each 5-year calendar period. [NOTE: THE GROUP SG11 TURBINES ARE NOT EQUIPPED WITH VOC CEMS; HOWEVER, THE GROUP SG11 TURBINES ARE EQUIPPED WITH NOx CEMS]
- (b) Except as provided in 25 Pa. Code §§129.97(k) and 129.99(i) (relating to alternative RACT proposal and petition for alternative compliance schedule), the owner and operator of an air contamination source subject to part (a), above, shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation in accordance with the procedures in part (a), above, not later than:
- (1) January 1, 2017, for a source subject to 25 Pa. Code §129.96(a) (relating to applicability).
- (2) [N/A THE GROUP SG11 TURBINES ARE NOT SUBJECT TO 25 Pa. Code §129.96(b)]
- (c) [N/A THE PERMITTEE (OWNER) HAS NOT REQUESTED A WAIVER]
- (d) The owner and operator of an air contamination source subject to this section (25 Pa. Code §129.100) and 25 Pa. Code §\$129.96 129.99 shall keep records to demonstrate compliance with 25 Pa. Code §\$129.96 129.99 in the following manner:
- (1) The records must include sufficient data and calculations to demonstrate that the requirements of 25 Pa. Code §§129.96 129.99 are met.
- (2) Data or information required to determine compliance shall be recorded and maintained in a time-frame consistent with the averaging period of the requirement.
- (e) [N/A THE GROUP SG11 TURBINES ARE NOT EXEMPT FROM THE NOX REQUIREMENTS OF 25 Pa. Code §129.97]
- (f) [N/A THE GROUP SG11 TURBINES ARE NOT EXEMPT FROM THE VOC REQUIREMENTS OF 25 Pa. Code §129.97]
- (g) [N/A THE GROUP SG11 TURBINES ARE NOT COMBUSTION UNITS]
- (h) [N/A THE GROUP SG11 TURBINES ARE NOT PORTLAND CEMENT KILNS]
- (i) The records shall be retained by the owner or operator for five (5) years and made available to the Department or







appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***







Group Name: SG12

Group Description: SOURCES SUBJECT TO TITLE IV ACID RAIN PROGRAM PROVISIONS

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 101 W/ DUCT BURNER
201	COMBUSTION TURBINE 201 W/ DUCT BURNER
301	COMBUSTION TURBINE 301 W/ DUCT BURNER

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.531]

Special conditions related to acid rain.

[Additional authority for this permit condition is also derived from Phase II Acid Rain Permit ARP-01-05029]

(a) The Group SG12 combustion turbines are subject to the Title IV Acid Rain Program Provisions of the Clean Air Act Amendments of 1990 and shall comply with all applicable requirements of that Title and include the following:

40 CFR Part 72 Permit Regulation
40 CFR Part 73 Sulfur Dioxide Allowance System
40 CFR Part 75 Continuous Emission Monitoring
40 CFR Part 76 Nitrogen Oxides Emission Reduction Program

40 CFR Part 77 Excess Emissions

NOTE: The Acid Rain Program identification for the facility is ORIS Code: 55976

- (b) 25 Pa. Code §127.531(f) and the Acid Rain Program Provisions of Title IV prohibit the following:
- (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide that the permittee or designated representative holds for the unit.
- (2) Exceeding applicable emission rates or standards, including ambient air quality standards.
- (3) The use of an allowance prior to the year for which it is allocated.
- (4) Contravention of other provisions of the permit.
- (c) 25 Pa. Code §127.531(g) and the Acid Rain Program Provisions of Title IV prohibit the emission of sulfur dioxide which exceeds any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations thereunder.
- (1) A permit revision will not be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, if the increases do not require a permit revision under another applicable requirement.
- (2) A limit will not be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with another applicable requirement.
- (3) An allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

002 [25 Pa. Code §127.531]

Special conditions related to acid rain.

[Additional authority for this permit condition is also derived from Phase II Acid Rain Permit ARP-01-05029]

The SO2 allowance allocations for the Group SG12 combustion turbines under the Title IV Acid Rain Program Provisions are the following:

Combustion Turbine 101 (Source ID 101)







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II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) The permittee shall keep sufficient records to demonstrate compliance with Condition #001, above.
- (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.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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





*** Permit Shield in Effect. ***





SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this permit.

DEP Auth ID: 1323045





SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



01-05029



SECTION H. Miscellaneous.

This operating permit addresses the combined cycle turbine electric generating facility at the Hunterstown Generating Station located at 1731 Hunterstown Road in Straban Township, Adams County. The Hunterstown Generating Station includes the following major equipment:

- (a) Three natural gas-fired combustion turbines (General Electric Model No. 7FA.04) each nominally rated at 182 MW (gross) and controlled by dry, low nitrogen oxide (NOx) burners. These are identified as Source IDs 101, 201 and 301. They were previously the subject of Plan Approval Nos. 01-05029 and 01-05029C, and Phase II Acid Rain Permit ARP-01-05029.
- (b) Three supplementary-fired heat recovery steam generators (HRSGs). These are associated with Source IDs 101, 201 and 301.
- (c) Three natural gas-fired duct burners nominally rated at 279 mmBtu/hr (HHV) each. These are identified as Source IDs 101, 201 and 301. They were previously the subject of Plan Approval Nos. 01-05029 and 01-05029C.
- (d) Three selective catalytic reduction (SCR) systems for NOx control. These are identified as Source IDs C101, C201 and C301. They were previously the subject of Plan Approval Nos. 01-05029 and 01-05029C.
- (e) One steam turbine electric generator nominally rated at 350 MW (at 53°F).
- (f) One natural gas-fired steam auxiliary boiler nominally rated at 33.5 mmBTU/hr. This is identified as Source ID 031.
- (g) One emergency diesel-fired fire water pump. This is identified as Source ID 501. It has a maximum rated capacity of 300 bhp with a maximum power output capacity of 224 kW.
- (h) One emergency diesel-fired engine-generator set. This is identified as Source ID 502. It has a maximum rated capacity of 157 bhp with a maximum power output capacity of 117 kW.

Heat input and power production (MW) capacities listed in Section A (Site Inventory), Section D (Source Level Requirements) and Section H (Miscellaneous) are for information and characterization purposes only and are not enforceable limits.

Source ID 501

Manufacturer: Clarke

Model Number: JDFP-06WR What the Engine Drives: Fire pump Ignition Type: Compression ignition Fuel Type: Diesel fuel oil (or No. 2 fuel oil)

Rated Engine Power Output Capacity: 300 brake HP

Rated Generator Power Output Capacity: N/A (since it is a fire pump engine and does not generate electic power)

Engine Displacement: (8.1 L) / (6 cylinders) = 1.35 L / cylinder

Model Year: 2002

Construction Date: ~ 1/01/02

Applicable Federal Subpart: MACT Subpart ZZZZ

Source ID 502 Manufacturer: Kohler Model Number: 100REOZJC

What the Engine Drives: Emergency generator

Ignition Type: Compression ignition Fuel Type: Diesel fuel oil (or No. 2 fuel oil)

Rated Engine Power Output Capacity: 157 brake HP Rated Generator Power Output Capacity: 117 kW

Engine Displacement: (4.5 L) / (4 cylinders) = 1.13 L / cylinder

Model Year: 2005

Construction Date: ~ 1/01/05

Applicable Federal Subpart: MACT Subpart ZZZZ



SECTION H. Miscellaneous.





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