COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: December 9, 2025 Effective Date: January 1, 2026

Expiration Date: December 31, 2030

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: 67-05147

Federal Tax Id - Plant Code: 30-0836295-1

Owner Information

Name: CALPINE MID MERIT II LLC
Mailing Address: 1055 PIKES PEAK RD
DELTA, PA 17314-9239

Plant Information

Plant: CALPINE MID MERIT II LLC/ YORK ENERGY CENTER BLOCK 2
Location: 67 York County 67950 Peach Bottom Township
SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: MARK CLEMENS
Title: PLANT MGR
Phone: (717) 456 - 2445 Email: Mark.Clemens@calpine.com

Permit Contact Person

Name: JOANN EDGAR
Title: EHS SPECIALIST III
Phone: (717) 456 - 2446 Email: joann.edgar@calpine.com

[Signature] _____

WILLIAM R. WEAVER, SOUTHCENTRAL REGION AIR PROGRAM MANAGER

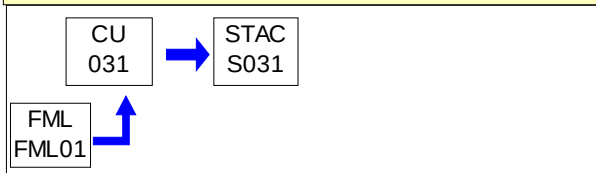
SECTION A. Table of Contents

SECTION A. Table of Contents

SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
031	AUXILIARY BOILER	61.000	MMBTU/HR	
		62.037	MCF/HR	Natural Gas
205	TURBINE UNIT 5 (BLOCK 2)	2,512.500	MMBTU/HR	
		2,291.642	MCF/HR	NG (W/O DUCT BURNER)
		3,137.758	MCF/HR	NG (W/ DUCT BURNER)
		846.116	MCF/HR	NG (DUCT BURNER ONL
		17,910.500	Gal/HR	ULSD
206	TURBINE UNIT 6 (BLOCK 2)	2,512.500	MMBTU/HR	
		2,291.642	MCF/HR	NG (W/O DUCT BURNER)
		3,137.758	MCF/HR	NG (W/ DUCT BURNER)
		17,910.500	Gal/HR	ULSD
		846.116	MCF/HR	NG (DUCT BURNER ONL
501	BLOCK 2 COOLING TOWER	10.217	M Gal/HR	COOLING WATER
502	NATURAL GAS PIPING COMPONENTS (BLOCK 2)		N/A	
503	CIRCUIT BREAKERS (BLOCK 2)		N/A	
504	NG CONDENSATE STORAGE TANKS & ULSD OIL STORAGE (BLOCK 2)		N/A	
C205A	UNIT 5 SCR			
C205B	UNIT 5 OXIDATION CATALYST			
C206A	UNIT 6 SCR			
C206B	UNIT 6 OXIDATION CATALYST			
C501	HIGH EFFICIENCY MIST ELIMINATOR			
FML01	NATURAL GAS			
FML02	ULTRA LOW SULFUR DIESEL/HEATING OIL (ULSD/ULSHO)			
S031	AUXILIARY BOILER STACK			
S205A	UNIT 5 COMBINED CYCLE STACK			
S206A	UNIT 6 COMBINED CYCLE STACK			
S501A	BLOCK 2 COOLING TOWER STACK			
S501B	BLOCK 2 COOLING TOWER STACK			
S501C	BLOCK 2 COOLING TOWER STACK			
S501D	BLOCK 2 COOLING TOWER STACK			
S501E	BLOCK 2 COOLING TOWER STACK			
S501F	BLOCK 2 COOLING TOWER STACK			
S501G	BLOCK 2 COOLING TOWER STACK			
S501H	BLOCK 2 COOLING TOWER STACK			
S501I	BLOCK 2 COOLING TOWER STACK			
S501J	BLOCK 2 COOLING TOWER STACK			
Z502	SOURCE 502 FUGITIVE EMISSIONS			
Z503	SOURCE 503 FUGITIVE EMISSIONS			
Z504	SOURCE 504 FUGITIVE EMISSIONS			

PERMIT MAPS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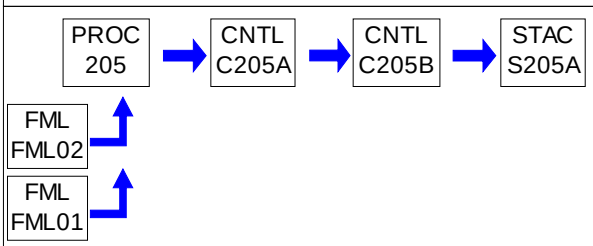
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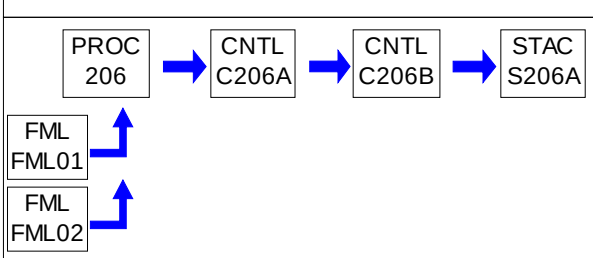
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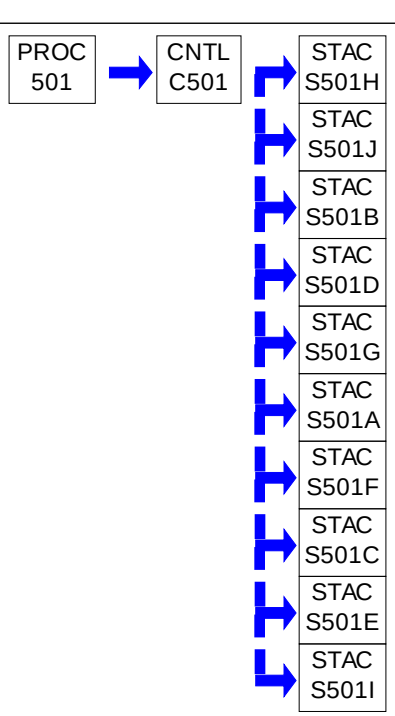
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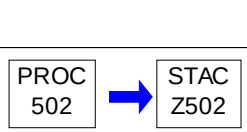
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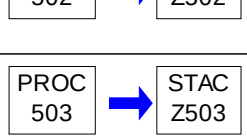
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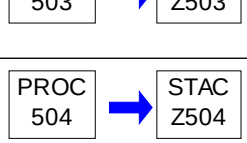
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SECTION B. General Title V Requirements

#001 [25 Pa. Code § 121.1]

Definitions

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

#002 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

#003 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

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

Permit Expiration

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

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

Permit Renewal

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

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

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

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

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

Transfer of Ownership or Operational Control

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

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit

SECTION B. General Title V Requirements

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.

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

Compliance Requirements

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

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

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

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

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#009 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

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

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

Duty to Provide Information

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

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

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

Reopening and Revising the Title V Permit for Cause

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

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

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

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

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

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

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

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

#012 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

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

SECTION B. General Title V Requirements

#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.

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

Fee Payment

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

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

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

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

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

(1) Eight thousand dollars ($8,000) for calendar years 2021—2025.

(2) Ten thousand dollars ($10,000) for calendar years 2026—2030.

(3) Twelve thousand five hundred dollars ($12,500) for the calendar years beginning with 2031.

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

Authorization for De Minimis Emission Increases

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

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

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

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

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of

SECTION B. General Title V Requirements

oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

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

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

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

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

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

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

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

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

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

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

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

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

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

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

Reactivation of Sources

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

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

#021 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

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

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

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

Submissions

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

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

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

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

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

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

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

Sampling, Testing and Monitoring Procedures

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this

SECTION B. General Title V Requirements

permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

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

#024 [25 Pa. Code § 127.513]

Compliance Certification

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

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

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

#025 [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.

SECTION B. General Title V Requirements

#026 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

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

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

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

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

#027 [25 Pa. Code § 127.3]

Operational Flexibility

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

(1) Section 127.14 (relating to exemptions)

(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:

SECTION B. General Title V Requirements

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

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

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

Permit Shield

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

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

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

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

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

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

SECTION B. General Title V Requirements

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

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

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

#031 [25 Pa. Code §135.3]

Reporting

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

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

#032 [25 Pa. Code §135.4]

Report Format

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

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

Unless otherwise stated elsewhere in the permit (e.g., Section E, Group 003, Condition #008), the permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(a) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any one hour.

(b) Equal to or greater than 60% at any time.

 # 005 [25 Pa. Code §123.42]

Exceptions

The emission limitations of Section C, Condition #004, 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.

SECTION C. Site Level Requirements

(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.

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

(a) Hazardous air pollutants (HAPs) - less than 10 tons of any single HAP, and less than 25 tons of total HAPs.

[NOTE: UNLESS AND UNTIL THE DEPARTMENT ISSUES AN AIR PERMIT PROVIDING TO THE CONTRARY, THIS OPERATING PERMIT CONDITION IS INCLUSIVE OF ALL SOURCES AT THE FACILITY RELATED TO EITHER BLOCK 1 OR BLOCK 2, INCLUDING ALL SOURCES IN THIS PERMIT, AND ALL SOURCES OPERATING UNDER TITLE V OPERATING PERMIT NO. 67-05083.]

 # 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 (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 permit 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 any source. In the request, the Department will set

SECTION C. Site Level Requirements

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, turbine load, fuel firing rate, SCR parameters, 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 for particulate matter collection occurred and that acceptable test conditions were met.

(6) Laboratory procedures and results.

(7) Calculated results.

III. MONITORING REQUIREMENTS.

 # 011 [25 Pa. Code §123.43]

Measuring techniques

The permittee shall measure visible emissions (referenced in Section C, Conditions #004, #005, and #011) 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 daily inspection around the plant periphery during daylight hours when the plant is in production to detect visible emissions, fugitive particulate matter emissions, and malodorous air contaminants. Daily inspections are necessary to determine:

(a) The presence of visible emissions as stated in Section C, Condition #004. Visible emissions may be measured according to the methods specified in Section C, Condition #010. 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,

SECTION C. Site Level Requirements

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.

(a) The permittee shall maintain records of the daily inspections referenced in Section C, Condition #011. The records shall include, at a minimum, the following information:

(1) The name of the company representative monitoring each inspection.

(2) The date and time of each inspection.

(3) The wind direction during each inspection.

(4) 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.

(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.

 # 014 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The permittee shall, at the minimum, record the following:

(a) Monthly fuel consumption.

(b) 12-month rolling total fuel consumption.

(c) Daily emissions of TSP/PM10, SO2, NOx, CO, VOC, H2SO4, ammonia, individual HAP, and total HAPs.

NOx and CO emissions will be measured by CEMS. NH3 emissions will be monitored by a CMS. SO2 emissions will be calculated based on fuel consumption and fuel sulfur content in accordance with 40 CFR, Part 75 requirements. The TSP/PM10, H2SO4, VOC, individual HAP, and total HAPs emissions will be based on fuel consumption and/or emission factors determined during compliant performance (stack) testing. Start-up and shutdown emissions will be calculated based on the recorded number of start-ups and shutdowns and the start-up and shutdown emission rates as approved by the Department.

(d) 12-month rolling total of TSP/PM10, SO2, NOx, CO, H2SO4, VOC, ammonia, individual HAP, and total HAPs in order to demonstrate compliance with Section C, Condition #006.

(e) Results of fuel sampling.

(f) The measured SCR parameters, including the ammonia slip and ammonia injection quantity.

V. REPORTING REQUIREMENTS.

 # 015 [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 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'.

SECTION C. Site Level Requirements

 # 016 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall annually report the greenhouse gas equivalent and the carbon dioxide emissions from the facility, in conjunction with the annual air emissions reporting of Section C, Condition #017(a).

 # 017 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

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

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

(1) The notice shall describe the following:
(i) name and location of the facility;
(ii) nature and cause of the malfunction;
(iii) time when the malfunction was first observed;
(iv) expected duration of excess emissions; and
(v) estimated rate of emissions.

(2) The permittee shall notify the Department immediately when corrective measures have been accomplished.

(b) Unless otherwise approved by DEP, all malfunctions shall be reported within five (5) days of malfunction discovery through the Department's Greenport PUP system available through:
https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home.

(c) 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

 # 018 [25 Pa. Code §135.3]

Reporting

The annual air emissions report required by Section B shall be submitted via AES*Online, unless otherwise specified.

VI. WORK PRACTICE REQUIREMENTS.

 # 019 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

SECTION C. Site Level Requirements

 # 020 [25 Pa. Code §127.444]

Compliance requirements.

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

VII. ADDITIONAL REQUIREMENTS.

 # 021 [25 Pa. Code §127.512]

Operating permit terms and conditions.

All emissions shall be determined by the methods found in 40 CFR Part 60, the Plan Approval Application (re: York Energy Center Block 2 Electricity Generation Project) and supplemental materials, and the Continuous Source Monitoring Manual, or any other method(s) approved by the Department.

 # 022 [25 Pa. Code §127.512]

Operating permit terms and conditions.

This operating permit and Title V Operating Permit No. 67-05083 are to be considered under common ownership, and their emissions aggregated, unless otherwise approved in writing by the Department.

VIII. COMPLIANCE CERTIFICATION.

The permittee shall submit within thirty days of 01/01/2026 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit, and annually thereafter.

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

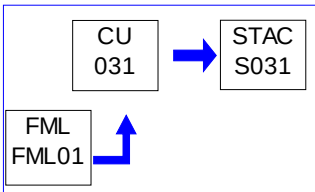
***** Permit Shield In Effect *****

SECTION D. Source Level Requirements

Source ID: 031 Source Name: AUXILIARY BOILER

Source Capacity/Throughput: 61.000 MMBTU/HR
62.037 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 001
006



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall not allow the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from the Source ID 031 auxiliary boiler in excess of 0.0015 pound 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 SO2 emission limit specified in 25 Pa. Code §123.22(a)(1)]

 # 002 [25 Pa. Code §127.205]

Special permit requirements.

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the emissions from the Source ID 031 auxiliary boiler to the following:

(a) NOx (expressed in terms of NO2) = 0.0086 lb/mmBTU (average of 3 test runs)

(b) VOC (expressed in terms of CH4) = 0.004 lb/mmBTU (vendor specifications)

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the Source ID 031 auxiliary boiler's annual emissions to less than or equal to the following thresholds during any consecutive 12-month period:

(a) 2.3 tons per year (TPY) of NOx.
(b) 15.6 TPY of carbon monoxide (CO).
(c) 1.1 TPY of volatile organic compounds (VOC).
(d) 0.4 TPY of sulfur dioxide (SO2).
(e) 1.3 TPY of particulate matter (PM).
(f) 1.3 TPY of PM-10 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 10 micron body).
(g) 1.3 TPY of PM-2.5 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 2.5 micron body).
(h) 0.0122 TPY of sulfuric acid mist (H2SO4).
(i) 0.0001 TPY of lead (Pb).
(j) 0.49 TPY of total hazardous air pollutants (HAPs)
(k) 31,030 TPY of greenhouse gases (GHGs) expressed as carbon dioxide equivalent (CO2e).

 # 004 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the

SECTION D. Source Level Requirements

emissions from the Source ID 031 auxiliary boiler to the following:

(a) CO = 0.06 lb/mmBTU (average of 3 test runs)

(b) PM = 0.005 lb/mmBTU/hr (vendor specifications)

(c) PM10/PM2.5 = 0.005 lb/mmBTU (vendor specifications)

(d) H2SO4 Mist = 0.000046 lb/mmBTU (vendor specifications)

[Compliance with the PM requirement specified in part (a)(2), above, assures compliance with 25 Pa. Code §123.11(a)(2)]

Fuel Restriction(s).

 # 005 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83 and the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1:

(a) The permittee shall operate the Source ID 031 auxiliary boiler using natural gas fuel only.

(b) The sulfur content of the natural gas fuel fired by the Source ID 031 auxiliary boiler shall not exceed 0.5 grain per 100 standard cubic feet.

[Compliance with the fuel sulfur content requirement specified in part (b), above, assures compliance with 25 Pa. Code §123.22(a)(1)]

II. TESTING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Pursuant to 25 Pa. Code §139.3, at least 30 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. 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, notification as to the date and time of testing shall be given to the Southcentral Regional Office. Notification shall also be sent to the Bureau of Air Quality's Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 25 Pa. Code §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, an electronic mail notification shall be sent to the Department's Bureau of Air Quality's Division of Source Testing and Monitoring and the Southcentral Regional Office indicating the completion date of the on-site testing.

(d) Pursuant to 25 Pa. Code §139.3, a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an 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 plan approval/operating permit conditions. The summary results will include, at a minimum, the following information:

(1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
(2) Plan approval/operating permit number(s) and condition(s) which are the basis for the evaluation.

SECTION D. Source Level Requirements

(3) Summary of results with respect to each applicable plan approval/operating permit condition.
(4) Statement of compliance or non-compliance with each applicable plan approval/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.

(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 through PSIMS*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal cannot be accomplished, one digital copy of each submittal shall be made to each of the following:

Regional Office:
Digital copy: RA-epscstacktesting@pa.gov

Bureau of Air Quality:
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.

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.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of the natural gas fuel sulfur content in order to demonstrate compliance with Condition #004(b), 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.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall calculate the monthly air emissions from the Source ID 031 auxiliary boiler using AP-42 emission factors, manufacturer-supplied emission factors, material balance, performance (stack) test data, CEMS data, or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the cumulative Source ID 031 auxiliary boiler air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 031 auxiliary boiler air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #001, above.

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

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a copy of the Source ID 031 auxiliary boiler manufacturer's recommendations/specifications on-site at all times.

SECTION D. Source Level Requirements

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of the Source ID 031 auxiliary boiler's monthly operating hours.

(b) The permittee shall maintain records of the Source ID 031 auxiliary boiler's monthly natural gas fuel combustion.

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

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain detailed records of all maintenance (preventive or otherwise) performed on the Source ID 031 auxiliary boiler. The records shall include, at a minimum, the following information:

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

(2) The date of each maintenance.

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

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

(c) The permittee shall maintain a copy of the Source ID 031 auxiliary boiler manufacturer's preventive maintenance schedule on-site at all times.

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.

 # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall at all times operate and maintain the Source ID 031 auxiliary boiler, including all associated monitoring equipment, in accordance with the manufacturer's recommendations/specifications (including the manufacturer's preventive maintenance schedule), as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

VII. ADDITIONAL REQUIREMENTS.

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

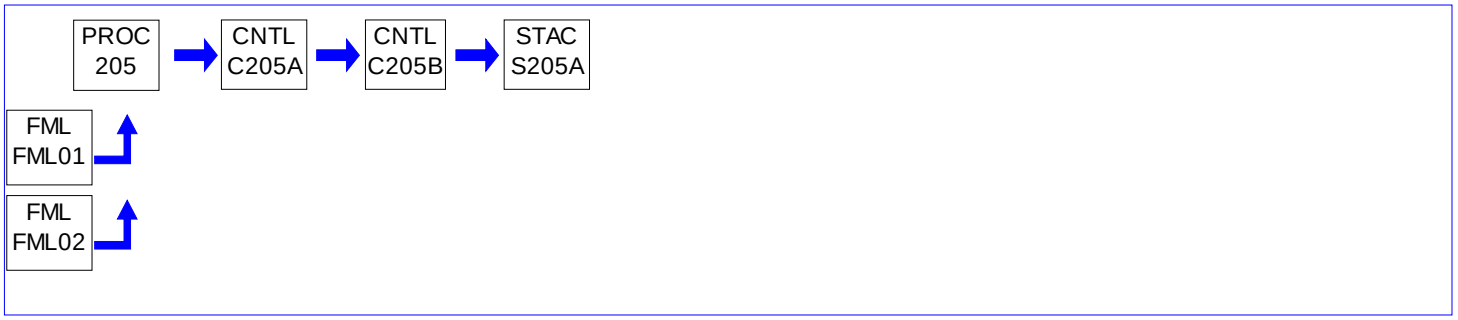
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 205 Source Name: TURBINE UNIT 5 (BLOCK 2)

Source Capacity/Throughput:	2,512.500	MMBTU/HR	
	2,291.642	MCF/HR	NG (W/O DUCT BURNER)
	3,137.758	MCF/HR	NG (W/ DUCT BURNER)
	17,910.500	Gal/HR	ULSD
	846.116	MCF/HR	NG (DUCT BURNER ONLY)

Conditions for this source occur in the following groups: 002
003
004
005
006
007



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).

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

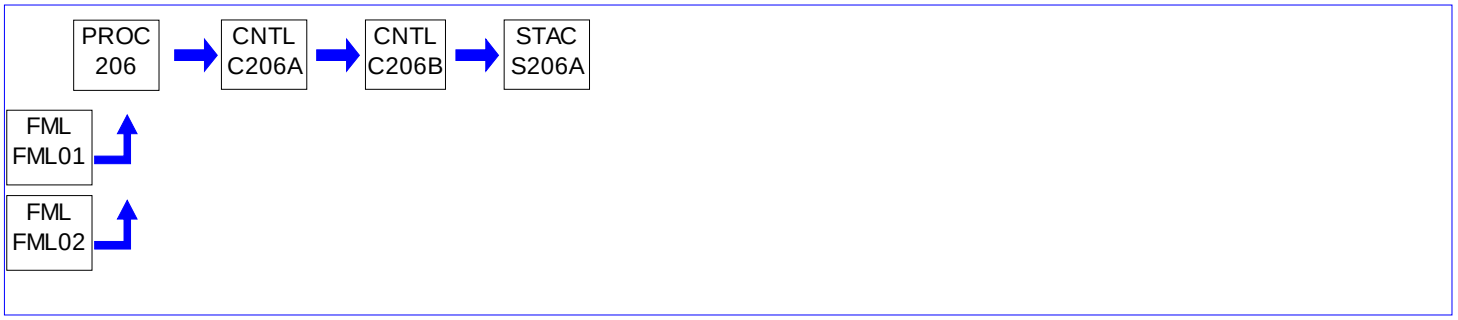
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 206 Source Name: TURBINE UNIT 6 (BLOCK 2)

Source Capacity/Throughput:	2,512.500	MMBTU/HR	
	2,291.642	MCF/HR	NG (W/O DUCT BURNER)
	3,137.758	MCF/HR	NG (W/ DUCT BURNER)
	17,910.500	Gal/HR	ULSD
	846.116	MCF/HR	NG (DUCT BURNER ONLY)

Conditions for this source occur in the following groups: 002
003
004
005
006
007



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).

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

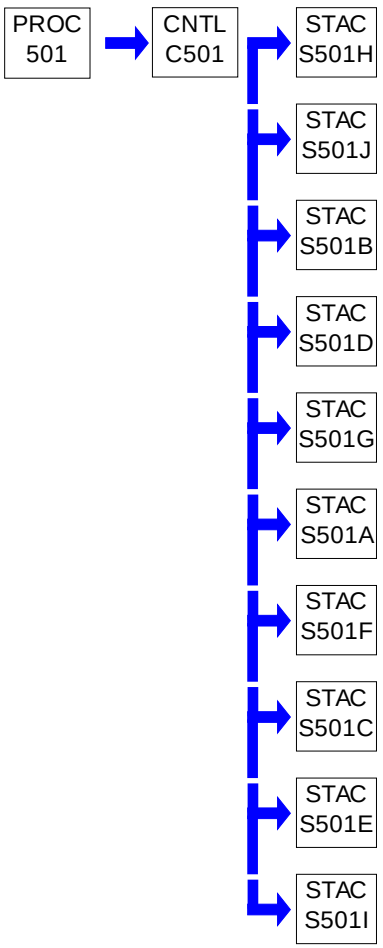
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

SECTION D. Source Level Requirements

Source ID: 501 Source Name: BLOCK 2 COOLING TOWER

Source Capacity/Throughput: 10.217 M Gal/HR COOLING WATER



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the emissions from the Source ID 501 cooling tower to the following:

(a) PM = 0.02 gr/dscf

(b) Visible emissions (VE) = 0% opacity (excludes the presence of uncombined water)

[Compliance with the PM and VE requirements specified in this streamlined permit condition assures compliance with 25 Pa. Code §§123.13(c)(1)(i) and 123.41, respectively]

 # 002 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the emissions from the Source ID 501 cooling tower to the following:

SECTION D. Source Level Requirements

(a) PM/PM10 = 0.9 lb/hr; 3.7 tons during any consecutive 12-month period

(b) PM2.5 = 0.5 lb/hr; 2.3 tons during any consecutive 12-month period

(c) Blowdown water drift droplet rate limit = 0.0005%

(d) Blowdown water total dissolved solids (TDS) limit = 2000 ppmw (monthly average TDS content during any consecutive 12-month period)

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall sample and analyze (via method(s) approved in its Department-issued NPDES water quality operating permit) the Source ID 501 cooling tower blowdown water discharge for total dissolved solids (TDS) content a minimum of twice monthly.

(b) The permittee shall calculate the monthly average TDS content of the Source ID 501 cooling tower blowdown water discharge samples referenced in part (a), above, as well as the monthly average TDS content of the samples for each consecutive 12-month period. The permittee shall maintain records of the monthly average TDS content of the samples for each consecutive 12-month period in order to demonstrate compliance with Condition #002(d), above.

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

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.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall calculate the monthly air emissions from the Source ID 501 cooling tower using emission factors contained in the plan approval application (P.A. No. 67-05083F) or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the cumulative Source ID 501 cooling tower air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 501 cooling tower air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #002(a)&(b), above.

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

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain the following records regarding the Source ID 501 cooling tower:

(1) Monthly water circulation flow rate as determined by the circulating pump motor electric current (amps);

(2) Monthly hours of operation;

(3) Manufacturer's guarantee (or equivalent, as approved by the Department) of the blowdown water drift droplet rate in order to demonstrate compliance with Condition #002(c), above;

SECTION D. Source Level Requirements

(4) Manufacturer's guarantee (or equivalent, as approved by the Department) of the PM/PM10/PM2.5 control efficiency of the high efficiency mist eliminator;

(5) MSDS (or equivalent, as approved by the Department) of each water treatment chemical used; and

(6) All maintenance performed on the high efficiency mist eliminator.

(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.

 # 006 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall operate the high efficiency mist eliminator at all times that the Source ID 501 cooling tower is operating.

 # 007 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall install, operate and maintain the Source ID 501 cooling tower and its associated high efficiency mist eliminator in accordance with the manufacturer's recommendations/specifications, as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

 # 008 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall use water treatment chemicals that do not contain chromium or zinc in the Source ID 501 cooling tower.

VII. ADDITIONAL REQUIREMENTS.

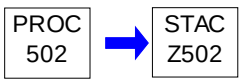
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

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

SECTION D. Source Level Requirements

Source ID: 502 Source Name: NATURAL GAS PIPING COMPONENTS (BLOCK 2)

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the methane (CH4) emissions from Source ID 502 to 2.2 tons 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.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall implement an audio, visual, and olfactory (AVO) program to detect the presence of fugitive leaks from Source ID 502's natural gas piping components (e.g., valves, flanges, connectors).

(b) The permittee shall, at a minimum frequency, perform monthly AVO inspections of Source ID 502's natural gas piping components.

 # 003 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83:

(a) The permittee shall implement an audio, visual, and olfactory (AVO) program to detect the presence of fugitive leaks from Source ID 502's natural gas piping components (e.g., valves, flanges, connectors, etc.).

(b) The permittee shall, at a minimum frequency, perform monthly AVO inspections of Source ID 502's natural gas piping components.

(c) The permittee shall maintain records of the AVO inspections referenced in part (b), above. The records shall include, at a minimum, the following information:

(1) The name of the company representative performing the AVO inspection.

(2) The date of each AVO inspection.

(3) A description of the presence of fugitive leaks, if any, and actions taken to mitigate them. If no fugitive leaks are observed, then document that none were observed.

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

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall calculate the monthly air emissions from Source ID 502 using emission factors contained in the plan approval application (P.A. No. 67-05083F) or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the cumulative Source ID 502 air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 502 air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #001, above.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall install, operate and maintain the Source ID 502 natural gas piping components 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.

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

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

SECTION D. Source Level Requirements

Source ID: 503 Source Name: CIRCUIT BREAKERS (BLOCK 2)

Source Capacity/Throughput: N/A

PROC 503 → STAC Z503

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall install, operate and maintain Source ID 503 circuit breakers that are totally enclosed, equipped with leak detection, and have a maximum expected design sulfur hexafluoride (SF6) leak rate of 0.5% (by weight) annually under normal operating conditions.

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.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Each time SF6 is added to any Source ID 503 circuit breaker, the permittee shall calculate the annualized SF6 weight percent leak rate for that circuit breaker since the last addition of SF6. If the calculated value exceeds 0.5% (by weight), this shall be deemed an excursion, and the permittee shall, within 15 days of the date of the SF6 addition, prepare and submit to the Department, in writing, a corrective action plan with a proposed schedule to reduce the future SF6 leak rate from the affected circuit breaker to less than 0.5% (by weight). The Department may require reasonable revisions to the plan if the plan fails to address the cause of the excursion, or fails to provide adequate procedures to correct the excursion as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The permittee shall retain each record described in part (a), above, for a minimum of five (5) years and shall make them available to the Department upon its request.

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall keep records of the following:

(1) The amount of SF6 dielectric fluid added to each Source ID 503 circuit breaker unit each month.

(2) The date and time that each alarm associated with a Source ID 503 circuit breaker is activated.

(3) The corrective action taken to remedy the problem associated with each alarm outlined in part (a)(2), above.

(4) The date corrective action remedied the problem outlined in part (a)(3), above.

(5) The name of the company representative performing the corrective action outlined in part (a)(4), above.

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

SECTION D. Source Level Requirements

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.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Source ID 503 circuit breakers shall be designed to meet American National Standards Institute (ANSI) C37.013 standards for high voltage circuit breakers.

(b) The Source ID 503 circuit breakers shall be equipped with low-pressure alarms that are first triggered when a ~13% reduction in the rated pressure is detected. When an alarm is triggered, the permittee shall take corrective action as soon as practicable to fix the circuit breaker units to a like-new state to prevent the emission of SF6 to the maximum extent practicable.

 # 005 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall install, operate and maintain the Source ID 503 circuit breakers 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.

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

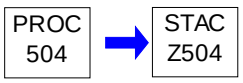
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 504 Source Name: NG CONDENSATE STORAGE TANKS & ULSD OIL STORAGE (BLOCK 2)

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: 006



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.205]

Special permit requirements.

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the VOC emissions from Source ID 504 to 0.6 ton 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) 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.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall calculate the monthly air emissions from Source ID 504 using emission factors contained in the plan approval application (P.A. No. 67-05083F) or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the cumulative Source ID 504 air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Source ID 504 air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #001, above.

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

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.

 # 003 [25 Pa. Code §127.205]

Special permit requirements.

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall install, operate and maintain Source ID 504 in accordance with the manufacturer's recommendations/specifications, as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

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

SECTION E. Source Group Restrictions.

Group Name: 001

Group Description: SOURCE SUBJECT TO NSPS SUBPART Dc

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]

(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 §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]

SECTION E. Source Group Restrictions.

(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]

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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 plan approval designated as having NSPS Subpart Dc as their authority, to the extent that such plan approval provisions would be inconsistent with the applicable provisions of the revised NSPS Subpart Dc.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

The Group 001 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 communications to both the U.S. Environmental Protection Agency (U.S. EPA) and the Department. The U.S. EPA copies shall be forwarded to the following, unless otherwise specified by the applicable regulation:

United States Environmental Protection Agency
Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

SECTION E. Source Group Restrictions.

Unless otherwise approved by DEP, the DEP copies shall be reported through the Department's Greenport PUP system available through: https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home.

 # 004 [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]

 # 005 [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 001, are defined in the Clean Air Act; in 40 CFR §60.2 (General Provisions); and in 40 CFR §60.41c.

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

SECTION E. Source Group Restrictions.

Group Name: 002

Group Description: SOURCES SUBJECT TO NSPS SUBPART KKKK

Sources included in this group

ID	Name
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What emission limits must I meet for nitrogen oxides (NOX)?

(a) You must meet the emission limits for NOx specified in Table 1 to 40 CFR Part 60, Subpart KKKK. [NOTE: FOR A NEW COMBUSTION TURBINE FIRING NATURAL GAS AND HAVING A HEAT INPUT AT PEAK LOAD (HIGHER HEATING VALUE) OF GREATER THAN 850 mmBTU/hr, THE NOx EMISSION STANDARD = 15 ppm @ 15% O2 or 54 ng/J of useful output (0.43 lb/MWh); FOR A NEW COMBUSTION TURBINE FIRING FUELS OTHER THAN NATURAL GAS (e.g., ULSD FUEL OIL) AND HAVING A HEAT INPUT AT PEAK LOAD (HIGHER HEATING VALUE) OF GREATER THAN 850 mmBTU/hr, THE NOx EMISSION STANDARD = 42 ppm @ 15% O2 or 160 ng/J of useful output (1.3 lb/MWh)]

(b) [N/A - THE COMBUSTION TURBINES ARE NOT DIRECTLY CONNECTED TO A SINGLE GENERATOR; EACH COMBUSTION TURBINE IS DIRECTLY CONNECTED TO A DEDICATED GENERATOR]

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4330]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What emission limits must I meet for sulfur dioxide (SO2)?

(a) If your turbine is located in a continental area, you must comply with either 40 CFR §60.4330(a)(1), (a)(2), or (a)(3), below. If your turbine is located in Alaska, you do not have to comply with the requirements in 40 CFR §60.4330(a) until January 1, 2008.

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output;

(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2 /J (0.060 lb SO2/mmBTU) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; or

(3) [N/A - THE COMBUSTION TURBINES DO NOT BURN ANY BIOGAS]

(b) [N/A - THE COMBUSTION TURBINES ARE NOT LOCATED IN A NONCONTINENTAL AREA OR A CONTINENTAL AREA THAT THE ADMINISTRATOR DETERMINES DOES NOT HAVE ACCESS TO NATURAL GAS]

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

[Compliance with the SOx requirements specified in part (a)(2) of this streamlined plan approval condition assures compliance with 25 Pa. Code §123.22(a)(1)]

II. TESTING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4400]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I conduct the initial and subsequent performance tests, regarding NOX ?

(a) You must conduct an initial performance test as required in 40 CFR §60.8. Subsequent NOx performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

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

SECTION E. Source Group Restrictions.

(i) Measure the NOx concentration (in parts per million (ppm)) using EPA Method 7E or EPA Method 20 in Appendix A of 40 CFR Part 60. For units complying with the output-based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 CFR Part 60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NOx emission rate:

E = [0.0000001194 * (NOx)c * Qstd] / P (Equation 5)

Where:

E = NOx emission rate, in lb/MWh;

0.0000001194 = conversion constant, in lb/dscf-ppm;

(NOx)c = average NOx concentration for the run, in ppm;

Qstd = stack gas volumetric flow rate, in dscf/hr; and

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation); for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines; or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 CFR §60.4350(f)(2); or

(ii) Measure the NOx and diluent gas concentrations using either EPA Methods 7E and 3A, or EPA Method 20 in Appendix A of 40 CFR Part 60. Concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 CFR Part 60 to calculate the NOx emission rate in lb/mmBTU. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR §60.4350(f) to calculate the NOx emission rate in lb/MWh. [EQUATIONS 1, 2 AND 3 IN 40 CFR §60.4350(f) ARE DEFINED BELOW; THE COMBUSTION TURBINES ARE COMBINED-CYCLE COMBUSTION TURBINES]

E = [(NOx)h * (HI)h] / P (Equation 1)

Where:

E = hourly NOx emission rate, in lb/MWh;

(NOx)h = hourly NOx emission rate, in lb/mmBTU;

(HI)h = hourly heat input rate to the unit, in mmBTU/hr measured using the fuel flowmeter(s), e.g., calculated using Equation D-15a in Appendix D to 40 CFR Part 75; and

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

P = (Pe)t + (Pe)c + Ps + Po (Equation 2)

Where:

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

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

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

Ps = (Q * H) / (3,413,000 BTU/MWh) (Equation 3)

Where:

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

Q = measured steam flow rate in lb/hr,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in BTU/lb,

3,413,000 = conversion from BTU/hr to MW, and

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

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

(3) Notwithstanding 40 CFR §60.4400(a)(2), above, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in Appendix A of 40 CFR Part 60 if the following conditions are met:

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

(A) [Reserved]; or

(B) The procedures specified in Section 6.5.6.1(a) through (e) of Appendix A of 40 CFR Part 75.

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

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

(B) For turbines with a NOx standard greater than 15 ppm @ 15% O2, you may sample at a single point located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOx concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3 ppm or ±0.3 percent CO2 (or O2) from the mean for all traverse points; or

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

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

(1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

(2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NOx emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.

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(3) [N/A - THE COMBUSTION TURBINES DO NOT EMPLOY WATER OR STEAM-TO-FUEL RATIO MONITORING]

(4) Compliance with the applicable emission limit in 40 CFR §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOx emission rate at each tested level meets the applicable emission limit in 40 CFR §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in 40 CFR §60.4405) as part of the initial performance test of the affected unit.

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

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4405]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I perform the initial performance test if I have chosen to install a NOX-diluent CEMS?

If you elect to install and certify a NOx-diluent CEMS under 40 CFR §60.4345, then the initial performance test required under 40 CFR §60.8 may be performed in the following alternative manner:

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

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

(c) Use the test data both to demonstrate compliance with the applicable NOx emission limit under 40 CFR §60.4320 and to provide the required reference method data for the RATA of the CEMS described under 40 CFR §60.4335.

(d) Compliance with the applicable emission limit in 40 CFR §60.4320 is achieved if the arithmetic average of all of the NOx emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4415]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

[NOTE: CALPINE INTENDS TO COMPLY WITH 40 CFR §60.4365(a); THEREFORE, SULFUR CONTENT MONITORING & PERFORMANCE TESTING IS NOT REQUIRED]

(a) You must conduct an initial performance test as required in 40 CFR §60.8. Subsequent SO2 performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see 40 CFR §60.17) for natural gas or ASTM D4177 (incorporated by reference, see 40 CFR §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in Section 14 of ASTM D4057 (incorporated by reference, see 40 CFR §60.17). The fuel analyses of this condition [40 CFR §60.4415] may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453 (all of which are incorporated by reference, see 40 CFR §60.17); or

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR §60.17).

(2) Measure the SO2 concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in Appendix A of 40 CFR Part 60. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, “Flue and Exhaust Gas Analyses,” manual methods for sulfur dioxide (incorporated by reference, see 40 CFR §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output-based standard, concurrently measure the stack gas flow rate using EPA Methods 1 and 2 in Appendix A of 40 CFR Part 60, and measure and record the electrical and

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thermal output from the unit. Then use the following equation to calculate the SO2 emission rate:

E = [0.0000001664 * (SO2)c * Qstd] / P (Equation 6)

Where:

E = SO2 emission rate, in lb/MWh;

0.0000001664 = conversion constant, in lb/dscf-ppm;

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

Qstd = stack gas volumetric flow rate, in dscf/hr; and

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation); for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines; or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 CFR §60.4350(f)(2); or

(3) Measure the SO2 and diluent gas concentrations using either EPA Methods 6, 6C, or 8 and 3A, or 20 in Appendix A of 40 CFR Part 60. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see 40 CFR §60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 CFR Part 60 to calculate the SO2 emission rate in lb/mmBTU. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR §60.4350(f) to calculate the SO2 emission rate in lb/MWh. [EQUATIONS 1, 2 AND 3 IN 40 CFR §60.4350(f) ARE DEFINED BELOW; THE COMBUSTION TURBINES ARE COMBINED-CYCLE COMBUSTION TURBINES]

E = [(SO2)h * (HI)h] / P (Equation 1)

Where:

E = hourly SO2 emission rate, in lb/MWh;

(SO2)h = hourly SO2 emission rate, in lb/mmBTU;

(HI)h = hourly heat input rate to the unit, in mmBTU/hr measured using the fuel flowmeter(s), e.g., calculated using Equation D-15a in Appendix D to 40 CFR Part 75; and

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

P = (Pe)t + (Pe)c + Ps + Po (Equation 2)

Where:

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

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

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

Ps = (Q * H) / (3,413,000 BTU/MWh) (Equation 3)

Where:

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

SECTION E. Source Group Restrictions.

Q = measured steam flow rate in lb/h,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in BTU/lb,

3,413,000 = conversion from Btu/h to MW, and

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

(b) [Reserved]

III. MONITORING REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4335]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I demonstrate compliance for NOX if I use water or steam injection?

[NOTE: THE COMBUSTION TURBINES WILL USE WATER INJECTION WHILE FIRING ULSD]

(a) [N/A - CALPINE WILL COMPLY WITH THE MONITORING REQUIREMENTS OF THIS SECTION (40 CFR §60.4335) VIA CEMS PURSUANT TO PART (b), BELOW]

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

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

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

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

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

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4340]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I demonstrate continuous compliance for NOX if I do not use water or steam injection?

[NOTE: THE COMBUSTION TURBINES WILL NOT USE WATER INJECTION WHILE FIRING NATURAL GAS]

(a) If you are not using water or steam injection to control NOx emissions, you must perform annual performance tests in accordance with 40 CFR §60.4400 to demonstrate continuous compliance. If the NOx emission result from the performance test is less than or equal to 75% of the NOx emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the NOx emission limit for the turbine, you must resume annual performance tests [NOTE: CALPINE WILL COMPLY WITH THE MONITORING REQUIREMENTS OF THIS SECTION (40 CFR §60.4340) VIA CEMS PURSUANT TO PART (b)(1), BELOW].

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in 40 CFR §§60.4335(b) and 60.4345, or

(2) [N/A - CALPINE WILL COMPLY WITH THE MONITORING REQUIREMENTS OF THIS SECTION (40 CFR §60.4340) VIA CEMS PURSUANT TO PART (b)(1), ABOVE]

SECTION E. Source Group Restrictions.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

If the option to use a NOx CEMS is chosen:

(a) Each NOx diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in Appendix B to 40 CFR Part 60, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in Appendix F to 40 CFR Part 60 is not required. Alternatively, a NOx diluent CEMS that is installed and certified according to Appendix A of 40 CFR Part 75 is acceptable for use under 40 CFR Part 60. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/mmBTU basis.

(b) As specified in 40 CFR §60.13(e)(2), during each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NOx emission rate for the hour.

(c) Each fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to 40 CFR Part 75 are acceptable for use under 40 CFR Part 60, Subpart KKKK.

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

(e) The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in 40 CFR §60.4345(a), (c), and (d), above. For the CEMS and fuel flow meters, the permittee may, with state approval, satisfy the requirements of 40 CFR §60.4345(e) herein by implementing the QA program and plan described in Section 1 of Appendix B to 40 CFR Part 75.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4350]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

For purposes of identifying excess emissions:

(a) All CEMS data must be reduced to hourly averages as specified in 40 CFR §60.13(h).

(b) For each unit operating hour in which a valid hourly average, as described in 40 CFR §60.4345(b), is obtained for both NOx and diluent monitors, the data acquisition and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/mmBTU, using the appropriate equation from Method 19 in Appendix A of 40 CFR Part 60. For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2 (or the hourly average CO2 concentration is less than 1.0 percent CO2), a diluent cap value of 19.0 percent O2 or 1.0 percent CO2 (as applicable) may be used in the emission calculations.

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

(d) If you have installed and certified a NOx diluent CEMS to meet the requirements of 40 CFR Part 75, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under 40 CFR Part 60, Subpart KKKK. Periods where the missing data substitution procedures in 40 CFR Part 75, Subpart D, are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR §60.7(c).

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

(f) Calculate the hourly average NOx emission rates, in units of the emission standards under 40 CFR §60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output-

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based standard:

(1) For simple-cycle operation [NOTE: THE COMBUSTION TURBINES ARE NOT SIMPLE-CYCLE UNITS AND ARE INCAPABLE OF SIMPLE-CYCLE OPERATION; THEY ARE COMBINED-CYCLE UNITS WITH HEAT RECOVERY; HOWEVER, EQUATION 1, BELOW, IS DEFINED SINCE IT IS REFERENCED IN 40 CFR §60.4350(f)(2), BELOW]:

E = [(NOx)h * (HI)h] / P (Equation 1)

Where:

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

(NOx)h = hourly NOx emission rate, in lb/mmBTU,

(HI)h = hourly heat input rate to the unit, in mmBTU/h, measured using the fuel flow meter(s), e.g., calculated using Equation D-15a in Appendix D to 40 CFR Part 75, and

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

(2) For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1, above, except that the gross energy output (P) is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW, as in the following equations:

P = (Pe)t + (Pe)c + Ps + Po (Equation 2)

Where:

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

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

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

Ps = (Q * H) / (3,413,000 BTU/MWh) (Equation 3)

Where:

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

Q = measured steam flow rate in lb/h,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in BTU/lb,

3,413,000 = conversion from Btu/h to MW, and

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

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

(g) [N/A - THE COMBUSTION TURBINES ARE NOT SIMPLE-CYCLE UNITS; THEY ARE COMBINED-CYCLE UNITS WITH HEAT RECOVERY]

(h) For combined-cycle and combined heat and power units with heat recovery, use the calculated hourly average emission

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rates from 40 CFR §60.4350(f), above, to assess excess emissions on a 30 unit operating day rolling average basis, as described in 40 CFR §60.4380(b)(1).

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4355]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I establish and document a proper parameter monitoring plan?

(a) The steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR §§60.4335 and 60.4340 must be monitored during the performance test required under 40 CFR §60.8 to establish acceptable values and ranges. You may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. You must develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. The plan must:

(1) Include the indicators to be monitored and show there is a significant relationship to emissions and proper operation of the NOx emission controls,

(2) Pick ranges (or designated conditions) of the indicators, or describe the process by which such range (or designated condition) will be established,

(3) Explain the process you will use to make certain that you obtain data that are representative of the emissions or parameters being monitored (such as detector location, installation specification if applicable),

(4) Describe quality assurance and control practices that are adequate to ensure the continuing validity of the data,

(5) Describe the frequency of monitoring and the data collection procedures which you will use (e.g., you are using a computerized data acquisition over a number of discrete data points with the average (or maximum value) being used for purposes of determining whether an exceedance has occurred), and

(6) Submit justification for the proposed elements of the monitoring. If a proposed performance specification differs from manufacturer recommendation, you must explain the reasons for the differences. You must submit the data supporting the justification, but you may refer to generally available sources of information used to support the justification. You may rely on engineering assessments and other data, provided you demonstrate factors which assure compliance or explain why performance testing is unnecessary to establish indicator ranges. When establishing indicator ranges, you may choose to simplify the process by treating the parameters as if they were correlated. Using this assumption, testing can be divided into two cases:

(i) All indicators are significant only on one end of range (e.g., for a thermal incinerator controlling volatile organic compounds (VOC) it is only important to insure a minimum temperature, not a maximum). In this case, you may conduct your study so that each parameter is at the significant limit of its range while you conduct your emissions testing. If the emissions tests show that the source is in compliance at the significant limit of each parameter, then as long as each parameter is within its limit, you are presumed to be in compliance.

(ii) Some or all indicators are significant on both ends of the range. In this case, you may conduct your study so that each parameter that is significant at both ends of its range assumes its extreme values in all possible combinations of the extreme values (either single or double) of all of the other parameters. For example, if there were only two parameters, A and B, and A had a range of values while B had only a minimum value, the combinations would be A high with B minimum and A low with B minimum. If both A and B had a range, the combinations would be A high and B high, A low and B low, A high and B low, A low and B high. For the case of four parameters all having a range, there are 16 possible combinations.

(b) For affected units that are also subject to 40 CFR Part 75 and that have state approval to use the low mass emissions methodology in 40 CFR §75.19 or the NOx emission measurement methodology in Appendix E to 40 CFR Part 75, you may meet the requirements of this paragraph [40 CFR §60.4355(b)] by developing and keeping on-site (or at a central location for unmanned facilities) a QA plan, as described in 40 CFR §75.19(e)(5) or in Section 2.3 of Appendix E to 40 CFR Part 75 and Section 1.3.6 of Appendix B to 40 CFR Part 75.

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 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4360]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR §60.17), which measure the major sulfur compounds, may be used.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How can I be exempted from monitoring the total sulfur content of the fuel?

[NOTE: CALPINE INTENDS TO COMPLY WITH 40 CFR §60.4365(a), ABOVE; THEREFORE, SULFUR CONTENT MONITORING IS NOT REQUIRED]

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

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than 26 ng SO2/J (0.060 lb SO2/mmBTU) heat input for continental areas and has potential sulfur emissions of less than 180 ng SO2/J (0.42 lb SO2/mmBTU) heat input for noncontinental areas; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO2/J (0.060 lb SO2/mmBTU) heat input for continental areas or 180 ng SO2/J (0.42 lb SO2/mmBTU) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 is required.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4370]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

(a) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to 40 CFR Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in 40 CFR §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day. [NOTE: CALPINE INTENDS TO COMPLY WITH 40 CFR §60.4365(a); THEREFORE, NATURAL GAS SULFUR CONTENT MONITORING IS NOT REQUIRED]

(c) Custom schedules. Notwithstanding the requirements of 40 CFR §60.4370(b), above, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR §60.4370(c)(1) and (c)(2), below, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 40 CFR §60.4330.

(1) The two custom sulfur monitoring schedules set forth in 40 CFR §60.4370(c)(1)(i) through (iv), and (c)(2), below, are

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acceptable without prior Administrator approval:

(i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in 40 CFR Part 60, Subpart KKKK. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in 40 CFR §60.4370(c)(1)(ii), (iii), or (iv), below, as applicable.

(ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in 40 CFR §60.4370(c)(1)(iii), below. If any measurement exceeds the applicable limit, follow the procedures in 40 CFR §60.4370(c)(1)(iv), below.

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

(A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR §60.4370(c)(1)(iv), below. Otherwise, follow the procedures in 40 CFR §60.4370(c)(1)(iii)(B), below.

(B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR §60.4370(c)(1)(iv), below. Otherwise, follow the procedures in 40 CFR §60.4370(c)(1)(iii)(C), below.

(C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR §60.4370(c)(1)(iv), below. Otherwise, continue to monitor at this frequency.

(iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to 40 CFR §60.4370(c)(1)(i), above. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of 40 CFR §60.4370(c)(1)(ii) or (iii), above, shall be followed.

(2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in Section 2.3.6 of Appendix D to 40 CFR Part 75 to determine a custom sulfur sampling schedule, as follows:

(i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required for the purposes of 40 CFR Part 60, Subpart KKKK.

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

(iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of 40 CFR §60.4370(c)(1)(iii), above.

(iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of 40 CFR §60.4370(c)(1)(iv), above.

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4410]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How do I establish a valid parameter range if I have chosen to continuously monitor parameters?

If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NOx emission controls in accordance with 40 CFR §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test to establish acceptable operating ranges for purposes of the parameter monitoring plan for the affected unit, as specified in 40 CFR §60.4355.

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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.

 # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What reports must I submit?

(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under 40 CFR Part 60, Subpart KKKK, you must submit reports of excess emissions and monitor downtime in accordance with 40 CFR §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

(b) For each affected unit that performs annual performance tests in accordance with 40 CFR §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4380]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How are excess emissions and monitor downtime defined for NOX ?

For the purpose of reports required under 40 CFR §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

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

(b) For turbines using continuous emission monitoring, as described in 40 CFR §§60.4335(b) and 60.4345:

(1) An excess emission is any unit operating period in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR §60.4320. For the purposes of 40 CFR Part 60, Subpart KKKK, a "4-hour rolling average NOx emission rate" is the arithmetic average of the average NOx emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NOx emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of 40 CFR Part 60, Subpart KKKK, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours.

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

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

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

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

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

SECTION E. Source Group Restrictions.

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4385]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How are excess emissions and monitoring downtime defined for SO2?

[NOTE: CALPINE INTENDS TO COMPLY WITH 40 CFR §60.4365(a); THEREFORE, SULFUR CONTENT MONITORING IS NOT REQUIRED]

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

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

(b) If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to 40 CFR §60.4385(a), above. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option.

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

 # 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4395]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

When must I submit my reports?

All reports required under 40 CFR §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

VI. WORK PRACTICE REQUIREMENTS.

 # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4333]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What are my general requirements for complying with this subpart?

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

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

VII. ADDITIONAL REQUIREMENTS.

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In the event that 40 CFR Part 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (NSPS Subpart KKKK) is revised, the permittee shall comply with the revised version of NSPS Subpart KKKK, and shall not be required to comply with any provisions in this operating permit (O.P. No. 67-05147) designated as having NSPS Subpart KKKK as their authority, to the extent that such operating permit provisions would be inconsistent with the applicable provisions of the revised NSPS Subpart KKKK.

 # 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

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

United States Environmental Protection Agency

SECTION E. Source Group Restrictions.

Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

Unless otherwise approved by DEP, the DEP copies shall be reported through the Department's Greenport PUP system available through: https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home.

 # 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4300]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What is the purpose of this subpart?

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

 # 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

Does this subpart apply to my stationary combustion turbine?

(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 mmBTU) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to 40 CFR Part 60, Subpart KKKK. Only heat input to the combustion turbine should be included when determining whether or not 40 CFR Part 60, Subpart KKKK, is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, 40 CFR Part 60, Subpart KKKK, does apply to emissions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under 40 CFR Part 60, Subpart KKKK, are exempt from the requirements of 40 CFR Part 60, Subpart GG. HRSG and duct burners regulated under 40 CFR Part 60, Subpart KKKK, are exempted from the requirements of 40 CFR Part 60, Subparts Da, Db, and Dc.

 # 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4315]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What pollutants are regulated by this subpart?

The pollutants regulated by 40 CFR Part 60, Subpart KKKK, are nitrogen oxide (NOx) and sulfur dioxide (SO2).

 # 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4420]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What definitions apply to this subpart?

Terms used in 40 CFR Part 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines, as well as Section E, Group 002, are defined in the Clean Air Act; in 40 CFR §60.2 (General Provisions); and in 40 CFR §60.4420.

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

SECTION E. Source Group Restrictions.

Group Name: 003

Group Description: COMBINED CYCLE COMBUSTION TURBINES

Sources included in this group

ID	Name
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.1]

Purpose.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the emission of ammonia from each Group 003 combustion turbine to 5.0 ppmvd (corrected to 15% oxygen; 3-hour block average).

 # 002 [25 Pa. Code §127.1]

Purpose.

(a) Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1, the permittee shall limit the SOx (expressed as SO2) emissions from each Group 003 combustion turbine to the following:

(1) firing NG with duct burner = 0.00149 lb/mmBTU (HHV)

(2) firing NG without duct burner = 0.00149 lb/mmBTU (HHV)

(3) firing ULSD with duct burner = 0.00152 lb/mmBTU (HHV)

(4) firing ULSD without duct burner = 0.00152 lb/mmBTU (HHV)

(b) Following the initial compliant emissions test,compliance with this condition shall be demonstrated by the combustion of low sulfur fuels as noted in Condition #009, below.

[Compliance with the SOx requirements specified in this streamlined permit condition assures compliance with 25 Pa. Code §123.22(a)(1) and 40 CFR §60.4330(a)(2)]

 # 003 [25 Pa. Code §127.205]

Special permit requirements.

Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the emissions from each Group 003 combustion turbine to the following:

(a) NOx (expressed in terms of NO2)
(1) firing NG with duct burner = 2.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(2) firing NG without duct burner = 2.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(3) firing ULSD with duct burner = 6.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(4) firing ULSD without duct burner = 6.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)

(b) VOC (expressed in terms of propane (C3H8))
(1) firing NG with duct burner = 0.7 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(2) firing NG without duct burner = 0.5 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(3) firing ULSD with duct burner = 0.7 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(4) firing ULSD without duct burner = 0.7 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)

(c) VOC (expressed in terms of methane (CH4))
(1) firing NG with duct burner = 1.9 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(2) firing NG without duct burner = 1.5 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(3) firing ULSD with duct burner = 1.9 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(4) firing ULSD without duct burner = 1.9 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)

SECTION E. Source Group Restrictions.

(d) The emission limits of parts (a), (b) and (c), above, do not apply during periods of startup and shutdown (S/S). S/S events are defined in Condition #010(b)&(c), below.

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

 # 004 [25 Pa. Code §127.205]

Special permit requirements.

(a) Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the NOx emissions from each Group 003 combustion turbine while firing natural gas fuel, during hours that include startup or shutdown (S/S) emissions, to the following:

S/S Event	Duration per event (hrs)	Emissions Per Unit (lb/event)
Cold Startup	6.0	1,359.0
Warm Startup	4.5	1,019.0
Hot Startup	2.5	566.0
Shutdown	0.5	133.0

S/S Events are defined in Condition #010(b)&(c), below.

(b) Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the NOx emissions from each Group 003 combustion turbine while firing ULSD fuel oil, during hours that include startup or shutdown (S/S) emissions, to the following:

S/S Event	Duration per event (hrs)	Emissions Per Unit (lb/event)
Cold Startup	6.0	1,914.0
Warm Startup	4.5	1,436.0
Hot Startup	2.5	798.0
Shutdown	0.5	160.0

S/S Events are defined in Condition #010(b)&(c), below.

(c) Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the VOC emissions from each Group 003 combustion turbine while firing natural gas fuel, during hours that include startup or shutdown (S/S) emissions, to the following:

S/S Event	Duration per event (hrs)	Emissions Per Unit (lb/event)
Cold Startup	6.0	1,134.0
Warm Startup	4.5	851.0
Hot Startup	2.5	473.0
Shutdown	0.5	95.0

S/S Events are defined in Condition #013(b)&(c), below. Unless otherwise approved in writing by DEP, the permittee shall calculate VOC emissions for startup and shutdown events using the combustion turbine manufacturer's VOC emissions curve.

(d) Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205, the permittee shall limit the VOC emissions from each Group 003 combustion turbine while firing ULSD fuel oil, during hours that include startup or shutdown (S/S) emissions, to the following:

S/S Event	Duration per event (hrs)	Emissions Per Unit (lb/event)
Cold Startup	6.0	186.0
Warm Startup	4.5	139.5
Hot Startup	2.5	77.5
Shutdown	0.5	25.0

S/S Events are defined in Condition #010(b)&(c), below. Unless otherwise approved in writing by DEP, the permittee shall

SECTION E. Source Group Restrictions.

calculate VOC emissions for startup and shutdown events using the combustion turbine manufacturer's VOC emissions curve.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the Group 003 combustion turbines' cumulative annual emissions to less than or equal to the following thresholds during any consecutive 12-month period:

(a) 358.9 tons per year (TPY) of NOx.
(b) 1,200.0 TPY of carbon monoxide (CO).
(c) 256.4 TPY of volatile organic compounds (VOC).
(d) 36.9 TPY of sulfur dioxide (SO2).
(e) 159.1 TPY of particulate matter (PM).
(f) 159.1 TPY of PM-10 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 10 micron body).
(g) 159.1 TPY of PM-2.5 (particulate matter having an effective aerodynamic diameter less than or equal to a nominal 2.5 micron body).
(h) 28.3 TPY of sulfuric acid mist (H2SO4).
(i) 0.0285 TPY of lead (Pb).
(j) 9.3 TPY of total hazardous air pollutants (HAPs)
(k) 2,896,556 TPY of greenhouse gases (GHGs) expressed as carbon dioxide equivalent (CO2e).

 # 006 [25 Pa. Code §127.83]

Adoption of program.

(a) Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the emissions from each Group 003 combustion turbine to the following:

(1) CO
(i) firing NG with duct burner = 2.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(ii) firing NG without duct burner = 2.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(iii) firing ULSD with duct burner = 3.5 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(iv) firing ULSD without duct burner >= 90% load = 2.0 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)
(v) firing ULSD without duct burner < 90 % load = 3.5 ppmvd @ 15% O2 (3-hour block average; average of 3 test runs)

(2) PM/PM10/PM2.5
(i) firing NG with duct burner = 0.0066 lb mmBTU (average of 3 test runs)
(ii) firing NG without duct burner = 0.0068 lb/mmBTU (average of 3 test runs)
(iii) firing ULSD with duct burner = 0.0152 lb/mmBTU (average of 3 test runs)
(iv) firing ULSD without duct burner = 0.0272 lb/mmBTU (average of 3 test runs)

(3) H2SO4 Mist
(i) firing NG with duct burner = 0.00114 lb/mmBTU (HHV) [average of 3 test runs]
(ii) firing NG without duct burner = 0.00114 lb/mmBTU (HHV) [average of 3 test runs]
(iii) firing ULSD with duct burner = 0.00117 lb/mmBTU (HHV) [average of 3 test runs]
(iv) firing ULSD without duct burner = 0.00117 lb/mmBTU (HHV) [average of 3 test runs]

(4) CO2e
(i) firing NG with duct burner = 883 lb/MW-hr (net)*
(ii) firing NG without duct burner = 883 lb/MW-hr (net)*
(iii) firing ULSD with duct burner = 1,285 lb/MW-hr (net)*
(iv) firing ULSD without duct burner = 1,285 lb/MW-hr (net)*

* compliance determined via 40 CFR Part 98, Subpart D emission factors and 40 CFR Part 98, Subpart A, Table A-1 global warming potentials (GWPs)

SECTION E. Source Group Restrictions.

(b) The emission limits of part (a)(1), above, do not apply during periods of startup and shutdown (S/S). S/S events are defined in Condition #010(b)&(c), below.

[Compliance with the PM requirement specified in part (a)(1) of this streamlined permit condition assures compliance with 25 Pa. Code §123.11(a)(3)]

 # 007 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the permittee shall limit the CO emissions from each Group 003 combustion turbine, during hours that include startup or shutdown (S/S) emissions, to the following:

S/S Event	Duration per event (hrs)	Emissions Per Unit (lb/event)
Cold Startup	6.0	7,266.0
Warm Startup	4.5	5,450.0
Hot Startup	2.5	3,028.0
Shutdown	0.5	606.0

S/S Events are defined in Condition #010(b)&(c), below.

 # 008 [25 Pa. Code §127.83]

Adoption of program.

The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants from each Group 003 combustion turbine in such a manner that the opacity of the emission is either of the following:

(a) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one hour.

(b) Equal to or greater than 30% at any time.

[Compliance with the visible emissions (VE) requirements specified in this streamlined permit condition assures compliance with 25 Pa. Code §123.41]

Fuel Restriction(s).

 # 009 [25 Pa. Code §127.83]

Adoption of program.

Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83 and the Best Available Technology (BAT) provisions of 25 Pa. Code §127.1:

(a) The permittee shall operate each Group 003 combustion turbine using either natural gas fuel or ultra-low sulfur diesel (ULSD) fuel oil only.

(b) The permittee shall operate each Group 003 combustion turbine's associated duct burner using natural gas fuel only.

(c) The permittee may operate each Group 003 combustion turbine's associated duct burner during periods of natural gas fuel firing or ULSD fuel oil firing by the Group 003 combustion turbine.

(d) The sulfur content of the natural gas fuel fired by each Group 003 combustion turbine shall not exceed 0.5 grain per 100 standard cubic feet.

(e) The sulfur content of the ULSD fuel oil fired by each Group 003 combustion turbine shall not exceed 0.0015% (by weight).

[Compliance with the fuel sulfur content requirements specified in parts (d) & (e) of this streamlined permit condition assures compliance with 25 Pa. Code §§123.22(a)(1) & 123.22(a)(2)(i)]

SECTION E. Source Group Restrictions.

Operation Hours Restriction(s).

 # 010 [25 Pa. Code §127.205]

Special permit requirements.

(a) Pursuant to the Lowest Achievable Emission Rate (LAER) provisions of 25 Pa. Code §127.205 and the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, the duration of each Group 003 combustion turbine startup and shutdown (S/S) event shall not exceed the following:

S/S Event
Cold Startup* = 6.0 hours
Warm Startup* = 4.5 hours
Hot Startup* = 2.5 hours
Shutdown = 0.5 hour

* In the event a combustion turbine fails to complete a startup cycle, any subsequent attempt(s) to start will be considered the same start-up event as the failed startup cycle's event.

(b) Startup and shutdown events are defined as follows:

(1) Shutdown (NG): Commences when the combustion turbine (CT) combustion temperature drops below the temperature required for optimal emissions operation, as signaled by the CT control system, with the intention of shutting down, and ends when the fuel injection into its combustion chambers is terminated.

[NOTE: The temperature required for optimal emissions operation, as referenced above, is a specific control point that is tied to the compressor discharge temperature, which in turn varies with ambient temperature. The CT control system will send a signal to the CEMS when this CT reference temperature drops below the optimum temperature.]

Shutdown (ULSD): Commences when the CT control system ends water injection for NOx control, as indicated by the CT control system, with the intention of shutting down and ends when the fuel injection into its combustion chambers is terminated.

(2) Startup: Commences with the fuel ignition in the combustion turbine combustion chambers and ends when the combustion turbine attains steady state compliance with emission levels of 2.0 ppmvd NOx (@ 15% O2; firing NG); 2.0 ppmvd CO (@ 15% O2; firing NG); 5.0 ppmvd NH3 (@ 15% O2; firing NG or ULSD); 6.0 ppmvd NOx (@ 15% O2; firing ULSD); 3.5 ppmvd CO (@ 15% O2; firing ULSD), for three consecutive 15-minute averaging periods, or the plan approval-allowed startup duration ends. The specific types of start-up events include the following:

(3) Cold Startup: Initiation of combustion turbine fuel ignition when either the steam turbine's high pressure bowl metal temperature is less than 400°F or the water temperature in its respective HRSG's high pressure steam drum is below 212°F (i.e., there is not a positive pressure indicated in the steam drum).

(4) Warm Startup: Initiation of combustion turbine fuel ignition when either the steam turbine's high pressure bowl metal temperature is between 400°F and 700°F or the water temperature in its respective HRSG's high pressure steam drum is between 212°F and 100F° below the saturation temperature associated with base load operating pressure.

(5) Hot Startup: Initiation of combustion turbine fuel ignition when the steam turbine's high pressure bowl metal temperature is greater than 700°F and the water temperature in its respective HRSG's high pressure steam drum is less than 100F° below the saturation temperature associated with base load operating pressure.

(6) If a startup event qualifies under more than one of the above startup event definitions, then it shall be classified under the coldest of the qualifying options.

(c) In the event that a Group 003 combustion turbine fuel transfer occurs (NG to ULSD or ULSD to NG):

(1) NG to ULSD: If a fuel transfer is initiated from NG firing to ULSD firing where the combustion turbine's load does not fall below 50% of base load, and the combustion turbine fuel valve controlling the new fuel changes to the appropriate position, for hourly emissions limit compliance purposes, the permittee shall comply with the higher hourly steady-state emissions limit of the two fuels (NG or ULSD) for the hour of fuel switch occurrence.

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(2) ULSD to NG: If a fuel transfer is initiated from ULSD firing to NG firing where the combustion turbine's load falls below 50% of base load and the combustion turbine fuel valve controlling the new fuel changes to the appropriate position, the event will be defined as a hot startup instead of a shutdown. For hourly emissions limit compliance purposes, the permittee shall comply with the higher emissions limit of the two fuels (NG or ULSD) for a hot start (lb/event) for the duration of the fuel switch event.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The cumulative operating hours of the Group 003 combustion turbines' duct burners while firing natural gas shall not exceed 9,000 hours during any consecutive 12-month period.

 # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The cumulative operating hours of the Group 003 combustion turbines while firing ULSD fuel oil with or without duct burner firing shall not exceed 960 hours during any consecutive 12-month period.

Throughput Restriction(s).

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each Group 003 combustion turbine shall not burn ULSD fuel oil for more than 10.0% of the average annual heat input during any three (3) consecutive calendar years or for more than 15.0% of the annual heat input during any one (1) calendar year.

[NOTE: This permit condition assures that the Group 003 combustion turbines do not satisfy the definition of "oil-fired electric utility steam generating unit" contained at 40 CFR §63.10042. Therefore, compliance with this permit condition assures that each Group 003 combustion turbine is not subject to the requirements of 40 CFR Part 63, Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units pursuant to 40 CFR §63.9981]

II. TESTING REQUIREMENTS.

 # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Pursuant to 25 Pa. Code §139.3, at least 30 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. 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, notification as to the date and time of testing shall be given to the Southcentral Regional Office. Notification shall also be sent to the Bureau of Air Quality's Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 25 Pa. Code §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, an electronic mail notification shall be sent to the Department's Bureau of Air Quality's Division of Source Testing and Monitoring and the Southcentral Regional Office indicating the completion date of the on-site testing.

(d) Pursuant to 25 Pa. Code §139.3, a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an 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 plan approval/operating permit conditions. The summary results will include, at a minimum, the following information:

(1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the

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findings.
(2) Plan approval/operating permit number(s) and condition(s) which are the basis for the evaluation.
(3) Summary of results with respect to each applicable plan approval/operating permit condition.
(4) Statement of compliance or non-compliance with each applicable plan approval/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.

(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 through PSIMS*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal cannot be accomplished, one digital copy of each submittal shall be made to each of the following:

Regional Office:
Digital copy: RA-epscstacktesting@pa.gov

Bureau of Air Quality:
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.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall perform source testing on both of the Block 2 combustion turbines to verify and demonstrate compliance once-every-5-calendar-year period using the reference methods, as per 25 Pa. Code Chapter 139. The source tests shall be conducted while each of the turbines is operating in each of the following modes, unless otherwise approved in writing by DEP:

(1) Firing natural gas with HRGS duct burner on.
(2) Firing natural gas with HRGS duct burner off.
(3) Firing ULSD with HRGS duct burner on.
(4) Firing ULSD with HRGS duct burner off.

(b) The performance test shall include the following:

(1) Visible Emissions (VE)
(2) Volatile Organic Compound (VOC), expressed as propane
(3) Volatile Organic Compound (VOC), expressed as methane
(4) Particulate Matter (PM)
(5) HAPs (Formaldehyde/Aldehyde(s), Acrolein)

 # 016 [25 Pa. Code §127.83]

Adoption of program.

(a) Pursuant to the Best Available Control Technology (BACT) provisions of 25 Pa. Code §127.83, if a Group 003 combustion turbine's thermal heat rate exceeds 7,470 BTU/kW-hr (net) while firing natural gas (NG) without duct burner during a required annual thermal efficiency test (or thermal efficiency retest) using test method ASME PTC 46 (or another test method approved by the Department), the permittee shall submit a maintenance plan to the Department within 60 days of receiving the test results (unless approved otherwise in writing by the Department) specifying the actions the permittee will implement in order for the Group 003 combustion turbine to not exceed the aforementioned thermal heat rate limit during a retest.

(b) The permittee shall conduct an annual thermal efficiency test of each Group 003 combustion turbine between 10 to 14 months after the date of the previous compliant thermal efficiency test. The thermal efficiency tests shall be performed while each Group 003 combustion turbine is firing NG without duct burner and operating at its maximum capacity or as

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close to its maximum capacity as it will operate (minimum combustion turbine operating load of 90% required).

III. MONITORING REQUIREMENTS.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for each Group 003 combustion turbine's respective SCR unit:

(1) Catalyst bed inlet gas temperature.

(2) Pressure diffential across the catalyst bed.

(3) Ammonia solution injection rate.

(b) The permittee shall install, operate and maintain instrumentation to continuously measure and display the following parameters for each Group 003 combustion turbine's respective oxidation catalyst:

(1) Catalyst bed inlet gas temperature.

(2) Pressure diffential across the catalyst bed.

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

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

IV. RECORDKEEPING REQUIREMENTS.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each Group 003 combustion turbine's monthly operating hours during startup/shutdown (S/S) events while firing natural gas and while firing ULSD fuel oil.

(b) The permittee shall maintain records of the cumulative operating hours of each Group 003 combustion turbine during S/S events while firing natural gas and while firing ULSD fuel oil for each consecutive 12-month period. This is necessary in order to demonstrate compliance with Condition #012, above.

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

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each Group 003 combustion turbine's annual heat input while firing ULSD fuel oil and while firing natural gas during each calendar year.

(b) The permittee shall maintain records of each Group 003 combustion turbine's annual heat input while firing ULSD fuel oil and while firing natural gas during each consecutive 3-calendar year period. This is necessary in order to demonstrate compliance with Condition #013, above.

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

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of the natural gas fuel sulfur content in order to demonstrate compliance with Condition #009(d), above.

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(b) The permittee shall maintain records of the fuel supplier's certification or laboratory analysis for each ultra-low sulfur diesel (ULSD) fuel oil delivery received in order to demonstrate compliance with Condition #009(e), above. The fuel supplier's certification or laboratory analysis shall include, at a minimum, the percent sulfur (by weight).

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

 # 021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall calculate the monthly air emissions from each Group 003 combustion turbine using AP-42 emission factors, manufacturer-supplied emission factors, material balance, performance (emissions) test data, CEMS data, or other method(s) acceptable to the Department. The permittee shall maintain records of the monthly air emissions.

(b) The permittee shall calculate the cumulative Group 003 combustion turbine air emissions for each consecutive 12-month period. The permittee shall maintain records of the cumulative Group 003 combustion turbine air emissions for each consecutive 12-month period in order to demonstrate compliance with Condition #003, above.

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

 # 022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain detailed records of all maintenance (preventive or otherwise) performed on each Group 003 combustion turbine and its respective SCR unit and oxidation catalyst. The records shall include, at a minimum, the following information:

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

(2) The date of each maintenance.

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

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

(c) The permittee shall maintain a copy of the Group 003 combustion turbine/SCR unit/oxidation catalyst manufacturer's preventive maintenance schedule on-site at all times.

 # 023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each Group 003 combustion turbine's monthly natural gas fuel combustion (not including duct burner).

(b) The permittee shall maintain records of each Group 003 combustion turbine's duct burner's monthly natural gas fuel combustion (duct burner only).

(c) The permittee shall maintain records of each Group 003 combustion turbine's monthly ULSD fuel oil combustion.

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

 # 024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each Group 003 combustion turbine's duct burner's monthly operating hours, as well as the cumulative monthly operating hours of both Group 003 combustion turbines' duct burners.

(b) The permittee shall maintain records of the cumulative operating hours of both Group 003 combustion turbines' duct burners for each consecutive 12-month period. This is necessary in order to demonstrate compliance with Condition #011, above.

SECTION E. Source Group Restrictions.

(c) The permittee shall maintain records of each Group 003 combustion turbine's monthly operating hours without duct burner firing.

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

 # 025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each Group 003 combustion turbine's monthly operating hours while firing ULSD fuel oil, as well as the cumulative monthly operating hours of both Group 003 combustion turbines while firing ULSD fuel oil.

(b) The permittee shall maintain records of the cumulative operating hours of both Group 003 combustion turbines while firing ULSD fuel oil for each consecutive 12-month period. This is necessary in order to demonstrate compliance with Condition #012, above.

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

 # 026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a copy of the Group 003 combustion turbine/SCR unit/oxidation catalyst manufacturer's recommendations/specifications on-site at all times.

 # 027 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain records of each malfunction of each Group 003 combustion turbine and its respective SCR unit and oxidation catalyst. A malfunction is any sudden, infrequent and not reasonably preventable failure of air pollution control or monitoring equipment, process equipment, or a process to operate in a normal or usual manner that may result in an increase in air emissions. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. The records shall include, at a minimum, the following information:

(1) The date of each malfunction.

(2) The time and duration of the malfunction.

(3) The cause of the malfunction.

(4) The corrective action taken to abate the malfunction.

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

 # 028 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the duration (hours) of each Group 003 combustion turbine's startup and shutdown event, including the date and times of each event. Air emissions of the non-monitored pollutants listed in Conditions #004 and #006, above, during these events shall be calculated based upon the emission rates presented in the plan approval application (re: P.A. No. 67-05083D). The emissions of CO and NOx during these events will be determined by each pollutant's respective Continuous Emissions Monitoring System (CEMS). All of these emissions shall be included in the monthly and consecutive 12-month air emissions calculations specified in Condition #021, above, as well as the annual report addressed in Section B.

V. REPORTING REQUIREMENTS.

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

SECTION E. Source Group Restrictions.

VI. WORK PRACTICE REQUIREMENTS.

 # 029 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall at all times operate and maintain each Group 003 combustion turbine and its respective SCR unit and oxidation catalyst, including all associated monitoring equipment, in accordance with the manufacturer's recommendations/specifications (including the manufacturer's preventive maintenance schedule), as well as in a manner consistent with good operating and air pollution control practices that minimize air emissions.

(b) The permittee shall operate each Group 003 combustion turbine's respective SCR unit and oxidation catalyst at all times the turbine is in operation once the relevant operating parameters (e.g., catalyst bed inlet gas temperature, air flow) are sufficient for proper control device operation pursuant to the manufacturer's recommendations/specifications.

(c) The permittee shall commence, and subsequently maintain, the ammonia flow for each Group 003 combustion turbine's respective SCR unit as soon as the SCR unit's catalyst bed inlet gas temperature reaches the minimum operating temperature as recommended by the SCR unit manufacturer. Each Group 003 combustion turbine's respective SCR unit shall be designed so it will not inject ammonia into the system when the catalyst bed inlet gas temperature is less than the minimum catalyst bed inlet gas temperature as recommended by the SCR unit manufacturer.

VII. ADDITIONAL REQUIREMENTS.

 # 030 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Group 003 combustion turbines are subject to the following federal regulations:

(1) Standards of Performance for Stationary Combustion Turbines (40 CFR Part 60, Subpart KKKK)

(2) Acid Rain Program (40 CFR Parts 72-78)

(3) Cross-State Air Pollution Rule (CSAPR) (40 CFR Part 97)

(4) Risk Management Plan (40 CFR Part 68, Subpart G) - Applicable if greater than 10,000 lbs of anhydrous ammonia is stored at the facility.

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

United States Environmental Protection Agency
Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

Unless otherwise approved by DEP, the DEP copies shall be reported through the Department's Greenport PUP system available through: https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home.

 # 031 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Group 003 combustion turbines are subject to the Title V 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

 # 032 [25 Pa. Code §127.441]

Operating permit terms and conditions.

SECTION E. Source Group Restrictions.

The Department reserves the right to use the CEMS data, emissions test results, and the operating parameters recorded during emissions testing of each Group 003 combustion turbine and its respective SCR and oxidation catalyst to verify emission rates, to establish emission factors, and to develop compliance assurance measures in this operating permit.

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

SECTION E. Source Group Restrictions.

Group Name: 004

Group Description: SOURCES SUBJECT TO CEMS REQUIREMENTS

Sources included in this group

ID	Name
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 001 [25 Pa. Code §123.51]

Monitoring requirements

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

(b) Sources subject to this condition (25 Pa. Code §123.51) shall install, operate and maintain continuous nitrogen oxides (NOx) monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for statutory sources).

(c) Sources subject to this condition (25 Pa. Code §123.51) shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with Chapter 139, Subchapter C.

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

(e) The Department may exempt a source from the requirements of part (b), above, if the Department determines that the installation of a continuous emissions monitoring system would not provide accurate determination of emissions or that installation of a continuous emissions monitoring system cannot be implemented by a source due to physical plant limitations or to extreme economic reasons. A source exempted from the requirements of part (b), above, shall satisfy alternative emissions monitoring and reporting requirements proposed by the source and approved by the Department which provide NOx emissions data that is representative of actual emissions of the source.

(f) Sources subject to this condition (25 Pa. Code §123.51) shall comply by October 20, 1993, unless the source becomes subject to the requirements later than October 20, 1990. For sources which become subject to the requirements after October 20, 1990, the source has 36 months from the date the source becomes subject to this condition (25 Pa. Code §123.51). The Department may issue orders providing a reasonable extension of time for sources that have made good faith efforts to install, operate and maintain continuous monitoring devices, but that have been unable to complete the operations within the time period provided.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(1) CEMS #1

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

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(b) Parameter to be Reported: CO

(c) Units of Measurement to be Reported: ppmvd

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

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

(f) Data Substitution Required: No

(g) Emission Standards

(1) Emission Standard #1:

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

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

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

(d) Variable Emission Standard: Yes

(2) Emission Standard #2:

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

(b) Emission Standard Value: 3.5 ppmvd corrected to 15% O2 (firing ULSD)

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

(d) Variable Emission Standard: Yes

(2) CEMS #2

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

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

(c) Units of Measurement to be Reported: ppmvd

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

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

(f) Data Substitution Required: No

(g) Emission Standards

(1) Emission Standard #1

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

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

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

(d) Variable Emission Standard: Yes

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(2) Emission Standard #2

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

(b) Emission Standard Value: 6.0 ppmvd corrected to 15% O2 (firing ULSD)

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

(d) Variable Emission Standard: Yes

(3) CEMS #3

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

(b) Parameter to be Reported: Ammonia

(c) Units of Measurement to be Reported: ppmvd

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

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

(f) Data Substitution Required: No

(g) Emission Standards

(1) Emission Standard #1

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

(b) Emission Standard Value: 5.0 ppmvd corrected to 15% O2

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

(d) Variable Emission Standard: No

(4) CEMS #4

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

(b) Parameter to be Reported: CO

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

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

(e) Correction basis of Measurement to be Reported: N/A

(f) Data Substitution Required: Yes (for purposes of TPY calculation)

(g) Emission Standards

(1) Emission Standard #1

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 1,211.0 lb/hr (cold startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(2) Emission Standard #2

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 1,211.0 lb/hr (warm startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(3) Emission Standard #3

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 1,211.0 lb/hr (hot startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(4) Emission Standard #4

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 1,211.0 lb/hr (shutdown)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(5) CEMS #5

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

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

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

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

(e) Correction basis of Measurement to be Reported: N/A

(f) Data Substitution Required: Yes (for purposes of TPY calculation)

(g) Emission Standards

(1) Emission Standard #1

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 226.5 lb/hr (firing NG; cold startup)

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

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(d) Variable Emission Standard: Yes (based on process operating condition)

(2) Emission Standard #2

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 226.5 lb/hr (firing NG; warm startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(3) Emission Standard #3

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 226.5 lb/hr (firing NG; hot startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(4) Emission Standard #4

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 226.5 lb/hr (firing NG; shutdown)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(6) CEMS #6

(a) Source Combination to be Monitored: Source IDs 205 and 206 (separately)

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

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

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

(e) Correction basis of Measurement to be Reported: N/A

(f) Data Substitution Required: Yes (for purposes of TPY calculation)

(g) Emission Standards

(1) Emission Standard #1

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 319.0 lb/hr (firing ULSD; cold startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

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(2) Emission Standard #2

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 319.0 lb/hr (firing ULSD; warm startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(3) Emission Standard #3

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 319.0 lb/hr (firing ULSD; hot startup)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

(4) Emission Standard #4

(a) Emission Standard Averaging Period Description: 1-hour block average

(b) Emission Standard Value: 319.0 lb/hr (firing ULSD; shutdown)

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

(d) Variable Emission Standard: Yes (based on process operating condition)

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

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain fuel flow meters for each Group 004 combustion turbine and its associated duct burner in accordance with the requirements of 40 CFR Part 75. The fuel flow will be measured in accordance with 40 CFR Part 75, Appendix D, requirements in lieu of continuous SO2 pollutant concentration and flow monitors for the purpose of determining hourly SO2 (and other non-CEM-monitored pollutants) mass emissions and heat input.

 # 004 [25 Pa. Code §139.101]

General requirements.

This condition (25 Pa. Code §139.101) applies to monitoring systems as defined in the manual referenced at 25 Pa. Code §139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under Section 4 of the Air Pollution Control Act (35 P.S. §4004).

(1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual" available from the Department shall be utilized to obtain Department approval. This publication includes:

(i) Installation requirements.

(ii) Performance specifications.

(iii) Test procedures.

(iv) Reporting requirements.

SECTION E. Source Group Restrictions.

(v) Quality assurance requirements.

(vi) Administrative procedures for obtaining Department approval.

(2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of persons qualified by training and experience.

(3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.

(4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.

(5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). The permittee shall retain these records for a minimum of five (5) years and shall make them available to the Department upon its request.

(6) The owner of a monitored source shall provide permanent sampling facilities as specified in 25 Pa. Code §139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.

(7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3).

(8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 25 Pa. Code §139.102.

(9) The Department's approval will be based on the criteria specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.

(10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than one (1) hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within two (2) hours of the malfunction.

(11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3).

(12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in Title 25 (Chapters 121 - 145), in a plan approval condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under Section 4 of the Air Pollution Control Act. For purposes of calculating data availability, "process down" time, as specified in the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3), shall be considered valid time.

(i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3).

(ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3).

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(13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.

(14) Monitoring systems shall comply with the applicable performance specifications section of the "Continuous Source Monitoring Manual" referenced in 25 Pa. Code §139.102(3). The Department has the authority to determine which of the performance specifications are applicable.

(15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.

(16) The requirements of this condition (25 Pa. Code §139.101) apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

V. REPORTING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

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

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

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

SECTION E. Source Group Restrictions.

VI. WORK PRACTICE REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

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

(a) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies, shall be valid as set forth in the quality assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001); or

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

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

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

(a) CO (ppmvd @ 15% O2)

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

(c) Ammonia (ppmvd @ 15% O2)

(d) CO (lb/hr)

(e) NOx (lb/hr; expressed as NO2)

VII. ADDITIONAL REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

Sampling, Testing and Monitoring Procedures

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

(b) Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, quality assurance, recordkeeping and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, Subpart C, Article III (relating to air

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resources), including Chapter 139 (relating to sampling and testing). The permittee shall also comply with applicable requirements related to monitoring, quality assurance, reporting and recordkeeping required by the Clean Air Act including §§114(a)(3) and 504(b) and regulations adopted thereunder, unless otherwise required by this permit.

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

SECTION E. Source Group Restrictions.

Group Name: 005

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

Sources included in this group

ID	Name
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This permit incorporates by reference the requirements of the 40 CFR Part 97 CSAPR NOX and SO2 Trading Programs, as applicable to the affected units, as follows (not all of the subparts apply, as described further below):

Subpart AAAAA: CSAPR NOX Annual Trading Program: 97.401 – 97.435
Subpart BBBBB: CSAPR NOX Ozone Season Group 1 Trading Program: 97.501 – 97.535
Subpart CCCCC: CSAPR SO2 Group 1 Trading Program: 97.601 – 97.635
Subpart EEEEE: CSAPR NOX Ozone Season Group 2 Trading Program: 97.801 – 97.835
Subpart GGGGG: CSAPR NOX Ozone Season Group 3 Trading Program: 97.1001 – 97.1035

Sources in PA were initially subject to CSAPR Subpart BBBBB for the control period of 2015-2016. On October 26, 2016, EPA published updates to CSAPR and sources in PA became subject to Subpart EEEEE (CSAPR NOx ozone Group 2). On April 30, 2021, EPA published additional updates to CSAPR and sources in PA became subject to Subpart GGGGG (CSAPR NOx Ozone Season Group 3 Trading Program). On November 6, 2024, EPA stayed the effectiveness of Subpart GGGGG with regard to emissions occurring in 2024 and thereafter, provided that while such stay remains in effect, the provisions of Subpart EEEEE of this section shall apply with regard to such emissions. The units remain subject to the TR NOx Annual Trading Program (40 CFR 97 Subpart AAAAA) and the TR SO2 Group 1 Trading Program (40 CFR 97 Subpart CCCCC). The above notwithstanding, in the event that 40 CFR Part 97 is revised, the permittee shall comply with the revised version of the part.

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

SECTION E. Source Group Restrictions.

Group Name: 006

Group Description: SOURCES REQUIRING ERC OFFSETS

Sources included in this group

ID	Name
031	AUXILIARY BOILER
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)
504	NG CONDENSATE STORAGE TANKS & ULSD OIL STORAGE (BLOCK 2)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.208]

ERC use and transfer requirements.

(a) The following was memorialized in Section E (Group 007), Condition #001, of P.A. No. 67-05083E that was issued on October 20, 2015 for Calpine Mid-Atlantic Development, LLC's York Energy Center Block 2 Electricity Generation Project at its Calpine Mid-Merit, LLC facility located in Peach Bottom Township, York County:

(1) In accordance with 25 Pa. Code §127.208(2), the Department authorizes the transfer and use of 372.4 TPY of NOx emission reduction credits (ERCs) for offset purposes from First Energy Solutions Corporation (formerly known as Allegheny Energy Supply Company, LLC) to Calpine Mid-Atlantic Development, LLC. The 372.4 TPY of NOx ERCs previously registered to First Energy Solutions Corporation (formerly known as Allegheny Energy Supply Company, LLC) were generated from the shutdown of a source (Unit #1) at the Armstrong Power Plant located in Washington Township, Armstrong County, Pennsylvania, on August 31, 2012. The Department certified and registered the 372.4 TPY of NOx ERCs on March 13, 2015.

(2) In accordance with 25 Pa. Code §127.208(2), the Department authorizes the transfer and use of 19.0 TPY of NOx ERCs for offset purposes from General Shale Brick, Inc. to Calpine Mid-Atlantic Development, LLC. The 19.0 TPY of NOx ERCs previously registered to General Shale Brick, Inc. were generated from the shutdown of sources (Kilns #3 & #4) at the Darlington Brick Plant located in Darlington Township, Beaver County, Pennsylvania, on October 31, 2005. The Department certified and registered the 19.0 TPY of NOx ERCs on November 21, 2007.

SECTION E. Source Group Restrictions.

(3) In accordance with 25 Pa. Code §127.208(2), the Department authorizes the transfer and use of 291.4 TPY of VOC ERCs for offset purposes from Quad/Graphics, Inc. to Calpine Mid-Atlantic Development, LLC. The 291.4 TPY of VOC ERCs previously registered to Quad/Graphics, Inc. were generated from the shutdown of the Quad Graphics (QG) Printing Corporation facility located in the Village of Depew, Erie County, New York, on December 21, 2011. The New York State Department of Environmental Conservation (NYSDEC) certified and registered the 291.4 TPY of VOC ERCs on April 2, 2013.

(4) The offsetting NOx and VOC ERCs are approved for use by Calpine Mid-Atlantic Development, LLC to comply with Section E (Group 007), Condition #001, above. This approval is in accordance with the requirements of 25 Pa. Code, Chapter 127, Subpart E (relating to New Source Review) including 25 Pa. Code §§127.205(4) and 127.210.

(5) In accordance with 25 Pa. Code §127.208(2), the NOx and VOC ERCs described in parts (a)(1), (a)(2), and (a)(3), above, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f) except as specified in 25 Pa. Code §127.206(g). If any of the NOx or VOC ERCs described in parts (a), (b), and (c), above, are not used and are subsequently re-entered into the ERC Registry System, the applicable 10-year expiration date will not be extended.

(b) The following addresses the NOx and VOC emissions increase component of Section E (Group 006), Condition #001, above. due to the power output capacity upgrade authorized by this P.A. No. 67-05083F:

(1) In accordance with 25 Pa. Code §127.208(2), the Department authorizes the transfer and use of 24.0 TPY of NOx emission reduction credits (ERCs) for offset purposes from First Energy Solutions Corporation (formerly known as Allegheny Energy Supply Company, LLC) to Calpine Mid-Atlantic Development, LLC. The 24.0 TPY of NOx ERCs previously registered to First Energy Solutions Corporation (formerly known as Allegheny Energy Supply Company, LLC) were generated from the shutdown of a source (Unit #1) at the Armstrong Power Plant located in Washington Township, Armstrong County, Pennsylvania, on August 31, 2012. The Department certified and registered the 24.0 TPY of NOx ERCs on March 13, 2015.

(2) In accordance with 25 Pa. Code §127.208(2), the Department authorizes the transfer and use of 5.5 TPY of VOC ERCs for offset purposes from Quad/Graphics, Inc. to Calpine Mid-Atlantic Development, LLC. The 5.5 TPY of VOC ERCs previously registered to Quad/Graphics, Inc. were generated from the shutdown of the Quad Graphics (QG) Printing Corporation facility located in the Village of Depew, Erie County, New York, on December 21, 2011. The New York State Department of Environmental Conservation (NYSDEC) certified and registered the 5.5 TPY of VOC ERCs on April 2, 2013.

(3) The offsetting NOx and VOC ERCs are approved for use by Calpine Mid-Atlantic Development, LLC to comply with Section E (Group 007), Condition #001, above. This approval is in accordance with the requirements of 25 Pa. Code, Chapter 127, Subpart E (relating to New Source Review) including 25 Pa. Code §§127.205(4) and 127.210.

(4) In accordance with 25 Pa. Code §127.208(2), the NOx and VOC ERCs described in parts (b)(1) and (b)(2), above, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f) except as specified in 25 Pa. Code §127.206(g). If any of the NOx or VOC ERCs described in parts (a), (b), and (c), above, are not used and are subsequently re-entered into the ERC Registry System, the applicable 10-year expiration date will not be extended.

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

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Group Name: 007

Group Description: SOURCES SUBJECT TO NSPS SUBPART TTTT

Sources included in this group

ID	Name
205	TURBINE UNIT 5 (BLOCK 2)
206	TURBINE UNIT 6 (BLOCK 2)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

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

United States Environmental Protection Agency
Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

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Unless otherwise approved by DEP, the DEP copies shall be reported through the Department's Greenport PUP system available through: https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5508]

Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

What is the purpose of this subpart?

Applicability

§ 60.5508 What is the purpose of this subpart?

This subpart establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions from a steam generating unit or an integrated gasification combined cycle (IGCC) facility that commences construction after January 8, 2014, commences reconstruction after June 18, 2014, or commences modification after January 8, 2014, but on or before May 23, 2023. This subpart also establishes emission standards and compliance schedules for the control of GHG emissions from a stationary combustion turbine that commences construction after January 8, 2014, but on or before May 23, 2023, or commences reconstruction after June 18, 2014, but on or before May 23, 2023. An affected steam generating unit, IGCC, or stationary combustion turbine shall, for the purposes of this subpart, be referred to as an affected electric generating unit (EGU).

[89 FR 40028, May 9, 2024]

§ 60.5509 What are my general requirements for complying with this subpart?

(a) Except as provided for in paragraph (b) of this section, the GHG standards included in this subpart apply to any steam generating unit or IGCC that commenced construction after January 8, 2014, or commenced modification or reconstruction after June 18, 2014, that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section. The GHG standards included in this subpart also apply to any stationary combustion turbine that commenced construction after January 8, 2014, but on or before May 23, 2023, or commenced reconstruction after June 18, 2014, but on or before May 23, 2023, that meets the relevant applicability conditions in paragraphs (a)(1) and (2) of this section.

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

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

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

(1) [NA – EGUs ARE NOT STEAM GEENRATING UNITS OR IGCC]

(2) [NA – EGUs NOT CAPABLE OF COMBUSTION 50% OR MORE OF NON-FOSSIL FUEL; ALSO, THEY ARE NOT SUBJECT TO A FEDERALLY ENFORCEABLE PERMIT CONDITION LIMITING THE ANNUAL CAPACITY FACTOR FOR ALL FOSSIL FUELS COMBINED OF 10% (0.10) OR LESS]

(3) [N/A - THE EGUs ARE NOT COMBINED HEAT & POWER UNITS; THEY ARE STATIONARY COMBUSTION TURBINES]

(4) [N/A - THE EGUs DO NOT SERVE A GENERATOR ALONG WITH OTHER STEAM GENERATING UNIT(S), IGCC, OR STATIONARY COMBUSTION TURBINE(S) WHERE THE EFFECTIVE GENERATION CAPACITY (DETERMINED BASED ON A PRORATED OUTPUT OF THE BASE LOAD RATING OF EACH STEAM GENERATING, IGCC, OR STATIONARY COMBUSTION TURBINE) IS 25 MW OR LESS]

(5) [N/A - THE EGUs ARE NOT MUNICIPAL WASTE COMBUSTORS]

(6) [N/A - THE EGUs ARE NOT COMMERCIAL OR INDUSTRIAL SOLID WASTE INCINERATION UNITS]

(7) [N/A - THE EGUs ARE NOT STEAM GENERATING UNITS OR IGCC; THEY ARE STATIONARY COMBUSTION

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TURBINES]

(8) [N/A - THE EGUs ARE CAPABLE OF COMBUSTING NATURAL GAS]

(9) [NA – EGUs DO NOT DERIVE GREATER THAN 50% OF HEAT INPUT FROM AN INDUSTRIAL PROCESS]

(10) [NA – NSPS SUBPART TTTTa DOES NOT APPLY]

[89 FR 40028, May 9, 2024]

Emission Standards

§ 60.5515 Which pollutants are regulated by this subpart?

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

(b) PSD and Title V thresholds for GHGs:

(1) For the purposes of 40 CFR §51.166(b)(49)(ii), with respect to GHG emissions from affected facilities, the "pollutant that is subject to the standard promulgated under Section 111 of the Act" shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in 40 CFR §51.166(b)(48) and in any SIP approved by the EPA that is interpreted to incorporate, or specifically incorporates, 40 CFR §51.166(b)(48).

(2) For the purposes of 40 CFR §52.21(b)(50)(ii), with respect to GHG emissions from affected facilities, the "pollutant that is subject to the standard promulgated under Section 111 of the Act" shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in 40 CFR §52.21(b)(49).

(3) For the purposes of 40 CFR §70.2, with respect to GHG emissions from affected facilities, the "pollutant that is subject to any standard promulgated under Section 111 of the Act" shall be considered to be the pollutant that otherwise is "subject to regulation" as defined in 40 CFR §70.2.

(4) For the purposes of 40 CFR §71.2, with respect to GHG emissions from affected facilities, the "pollutant that is subject to any standard promulgated under Section 111 of the Act" shall be considered to be the pollutant that otherwise is "subject to regulation" as defined in 40 CFR §71.2.

§ 60.5520 What CO2 emissions standard must I meet?

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

(b) – (c) [NA – EGUs QUALIFY UNDER PARAGRAPH (d)(1) BELOW]

(d) Owners or operators of a stationary combustion turbine that maintain records of electric sales to demonstrate that the stationary combustion turbine is subject to a heat input-based standard in table 2 to this subpart that are only permitted to burn one or more uniform fuels, as described in paragraph (d)(1) of this section, are only subject to the monitoring requirements in paragraph (d)(1). Owners or operators of all other stationary combustion turbines that maintain records of electric sales to demonstrate that the stationary combustion turbines are subject to a heat input-based standard in table 2 are only subject to the requirements in paragraph (d)(2) of this section.

(1) Owners or operators of stationary combustion turbines that are only permitted to burn fuels with a consistent chemical composition (i.e., uniform fuels) that result in a consistent emission rate of 69 kilograms per gigajoule (kg/GJ) (160 lb CO2/MMBtu) or less are not subject to any monitoring or reporting requirements under this subpart. These fuels include, but are not limited to hydrogen, natural gas, methane, butane, butylene, ethane, ethylene, propane, naphtha, propylene, jet fuel kerosene, No. 1 fuel oil, No. 2 fuel oil, and biodiesel. Stationary combustion turbines qualifying under this paragraph are only required to maintain purchase records for permitted fuels.

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(2) [N/A - THE STATIONARY COMBUSTION TURBINES ARE NOT PERMITTED TO BURN FUELS THAT DO NOT HAVE A CONSISTENT CHEMICAL COMPOSITION (i.e., NON-UNIFORM FUELS)]

[89 FR 40029, May 9, 2024]

General Compliance Requirements

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

Combustion turbines qualifying under § 60.5520(d)(1) are not subject to any requirements in this section other than the requirement to maintain fuel purchase records for permitted fuel(s). [NOTE: EGUs QUALIFY UNDER § 60.5520(d)(1); THEREFORE, THE REST OF THE PARAGRAPH DOES NOT APPLY AND HAS BEEN DELETED]

(a) – (c) [NA – EGUs QUALIFY UNDER § 60.5520(d)(1)]

[89 FR 40029, May 9, 2024]

Monitoring and Compliance Determination Procedures

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

(a) Combustion turbines qualifying under § 60.5520(d)(1) are not subject to any requirements in this section other than the requirement to maintain fuel purchase records for permitted fuel(s). [NOTE: EGUs QUALIFY UNDER § 60.5520(d)(1); THEREFORE, THE REST OF THE PARAGRAPH DOES NOT APPLY AND HAS BEEN DELETED]

(b) – (g) [NA – EGUs QUALIFY UNDER § 60.5520(d)(1)]

[80 FR 64648, Oct. 23, 2015, as amended at 89 FR 40030, May 9, 2024]

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

(a) – (b) [NA - EGUs QUALIFY UNDER § 60.5520(d)(1); THEREFORE TABLE 2 STANDARDS DO NOT APPLY]

[89 FR 40031, May 9, 2024]

Notification, Reports, and Records

§ 60.5550 What notifications must I submit and when?

(a) You must prepare and submit the notifications specified in §§ 60.7(a)(1) and (3) and 60.19, as applicable to your affected EGU(s) (see table 3 of this subpart). [NOTE: 40 CFR §§60.7(a)(1)&(3) AND 60.19 ARE DESCRIBED BELOW]

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

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40 CFR §60.7 REQUIREMENTS

(a) Any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 CFR §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
END 40 CFR §60.7 REQUIREMENTS

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40 CFR §60.19 REQUIREMENTS

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f)(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

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(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

END 40 CFR §60.19 REQUIREMENTS

§ 60.5555 What reports must I submit and when?

(a) You must prepare and submit reports according to 40 CFR §60.5555(a) through (d), below, as applicable.

(1) [NA – NOT REQUIRED TO CONDUCT INITIAL/ONGOING COMPLIANCE DEMONSTRATIONS]

(2) – (3) [NA – QUARTERLY REPORTS NOT REQUIRED]

(b) [NA – NO REPORTS REQUIRED UNDER § 60.5555(a)]

(c) [N/A - CEMS ARE NOT REQUIRED]

(d) [NA – NO REPORTS REQUIRED UNDER § 60.5555(a) or (c)(1)]

(e) [N/A - THE EGUs ARE SUBJECT TO THE ACID RAIN PROGRAM]

(f) [N/A - THE EGUs DO NOT CAPTURE CO2 TO MEET THE APPLICABLE EMISSION LIMIT]

(g) [N/A - THE EGUs DO NOT CAPTURE CO2 TO MEET THE APPLICABLE EMISSION LIMIT]

[80 FR 64648, Oct. 23, 2015, as amended at 89 FR 40033, May 9, 2024]

§ 60.5560 What records must I maintain?

(a) You must maintain records of the information you used to demonstrate compliance with this subpart as specified in 40 CFR §60.7(b) and (f). [NOTE: 40 CFR §§60.7(b)&(f) ARE DESCRIBED BELOW]

(b)(1) For affected EGUs subject to the Acid Rain Program, you must follow the applicable recordkeeping requirements and maintain records as required under Subpart F of 40 CFR Part 75.

(2) [N/A - THE EGUs ARE SUBJECT TO THE ACID RAIN PROGRAM]

(c) [NA – HOURLY AND TOTAL CO2 EMISSION CALCULATIONS NOT REQUIRED]

(d) [NA – EGUs QUALIFY UNDER § 60.5520(d)(1); THEREFORE, OUTPUT BASED EMISSION STANDARD DOES NOT APPLY]

(e) – (f) [NA – NOT REQUIRED TO CALCULATE CO2 MASS EMISSION RATES TO DEMONSTRATE COMPLIANCE WITH AN EMISSION STANDARD]

(g) [N/A - CEMS ARE NOT REQUIRED; THEREFORE, SITE-SPECIFIC CARBON-BASED F-FACTORS ARE NOT RELEVANT]

(h) For stationary combustion turbines, you must keep records of electric sales to determine the applicable subcategory.

(i) You must keep the records listed in paragraphs (i)(1) through (3) of this section to demonstrate that your affected facility operated during a system emergency.

(1) Documentation that the system emergency to which the affected EGU was responding was in effect from the entity issuing the alert, and documentation of the exact duration of the event;

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(2) Documentation from the entity issuing the alert that the system emergency included the affected source/region where the affected facility was located, and

(3) Documentation that the affected facility was instructed to increase output beyond the planned day-ahead or other near-term expected output and/or was asked to remain in operation outside its scheduled dispatch during emergency conditions from a Reliability Coordinator, Balancing Authority, or Independent System Operator/Regional Transmission Organization.

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40 CFR §60.7 REQUIREMENTS

(b) Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(f) Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) [N/A - CEMS ARE NOT REQUIRED]

(2) [N/A - CEMS ARE NOT REQUIRED]

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by 40 CFR §60.7(f), if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

END 40 CFR §60.7 REQUIREMENTS

[80 FR 64648, Oct. 23, 2015, as amended at 89 FR 40033, May 9, 2024]

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

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

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

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

Other Requirements and Information

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

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

§ 60.5575 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the EPA, or a delegated authority such as your state, local, or tribal agency. If the Administrator has delegated authority to your state, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this

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subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency, the Administrator retains the authorities listed in paragraphs (b)(1) through (5) of this section and does not transfer them to the state, local, or tribal agency. In addition, the EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the emission standards.

(2) Approval of major alternatives to test methods.

(3) Approval of major alternatives to monitoring.

(4) Approval of major alternatives to recordkeeping and reporting.

(5) Performance test and data reduction waivers under § 60.8(b).

§ 60.5580 What definitions apply to this subpart? [INCORPORATED BY REFERENCE]

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

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

#001. This operating permit incorporates the provisions of the following plan approvals:

1. P.A. No. 67-05083D: Original Block 2 plan approval (superseded in its entirety by P.A. No. P.A. No. 67-05083F).

2. P.A. No. 67-05083E: Remaining ERCs for Block 2 turbines.

3. P.A. No. 67-05083F: Modification to Block 2 plan approval. Authorized increase to duct burner heat input capacities and allowed firing of duct burners while firing ULSD. Superseded P.A. No. 67-05083D in its entirety.

4. P.A. No. 67-05083G: Modification and finalization of Block 2 turbine BACT emission limitations.

5. P.A. No. 67-05083H: Modification of Block 2 plan approval. Revised turbine startup/shutdown limits to "lb/event", removed explicit startup/shutdown hour limitations. clarified fuel switching events, removed CO/VOC correlation factor, added 5-year stack testing, and authorized the use of manufacturer curve for VOC startup/shutdown emissions.

#002. The following sources do not require any work practice standards, or restrictions, monitoring, recordkeeping, and reporting standards:

(a) Ammonia storage tank

(b) Miscellaneous liquid storage tanks, subject to the liquid vapor pressure equal to or greater than 1.5 psia, covered under 25 Pa. Code Sections 129.56(a), and 129.57, with the applicable tanks installed pressure relief valve(s).

#003. RFD #10623 (4/4/24) authorizes the use of Ultra Low Sulfur Heating Oil (ULSHO) in the same capacity as Ultra Low Sulfur Diesel (ULSD). Fuel sample vendor data verify these products have identical material properties. Any reference to the ULSD in the operating permit also applies to ULSHO.

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