



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

**STATE ONLY SYNTHETIC MINOR OPERATING PERMIT**

Issue Date: November 27, 2024

Effective Date: April 19, 2025

Expiration Date: April 19, 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 unless otherwise designated.

**State Only Permit No: 40-00005**

Synthetic Minor

Federal Tax Id - Plant Code: 23-1650159-10

**Owner Information**

Name: HUNLOCK CREEK GENERATING LLC

Mailing Address: 390 ROUTE 11

HUNLOCK CREEK, PA 18621-0224

**Plant Information**

Plant: HUNLOCK CREEK GENERATING LLC/HUNLOCK CREEK ENERGY CENTER

Location: 40 Luzerne County

40943 Hunlock Township

SIC Code: 4911 Trans. & Utilities - Electric Services

**Responsible Official**

Name: DEAN MILLER

Title: PLANT MANAGER

Phone: (570) 542 - 2784

Email: Dean.Miller@riverviewpwr.com

**Permit Contact Person**

Name: JEFFREY STEEBER

Title: ENVIRONMENTAL LEAD

Phone: (570) 542 - 2790

Email: Jeffrey.steeber@riverviewpwr.com

[Signature] \_\_\_\_\_

*MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER*



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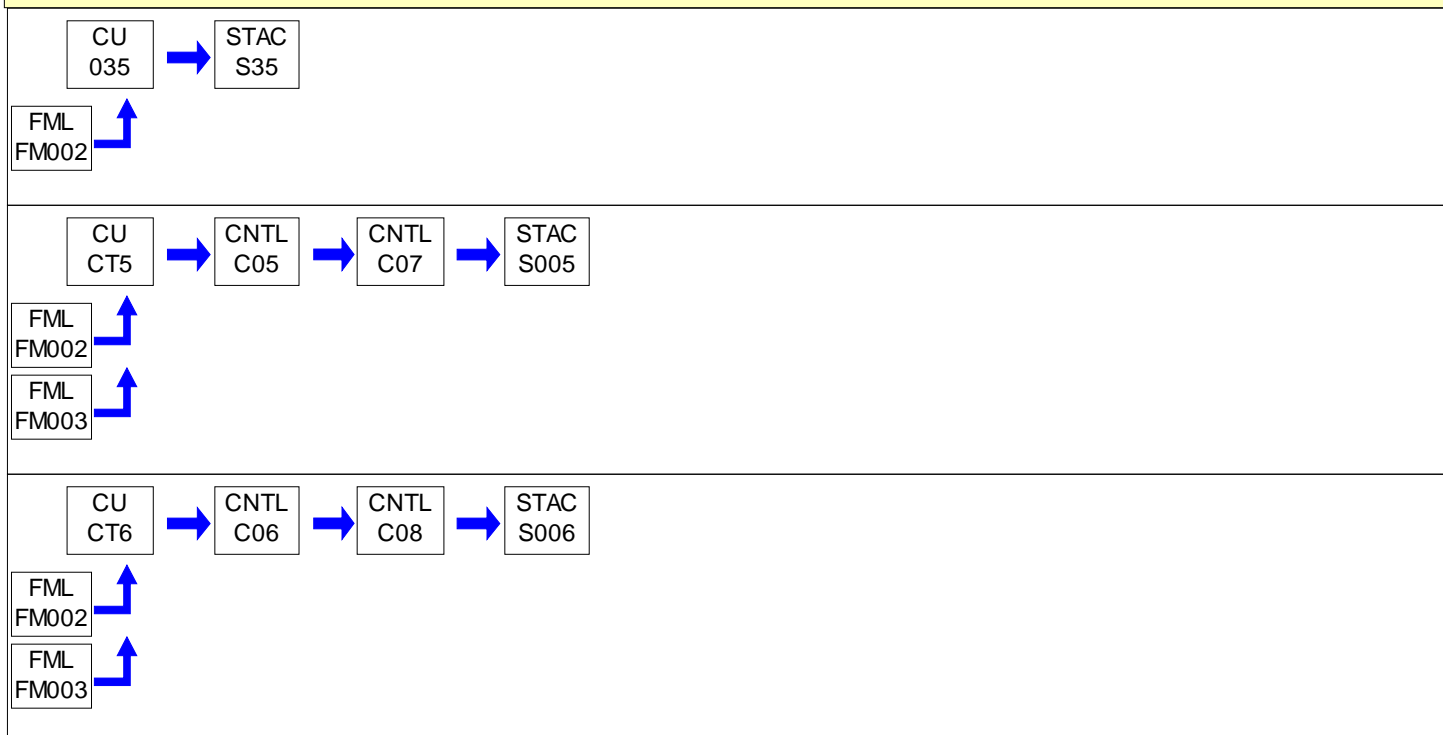
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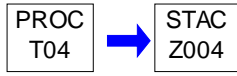
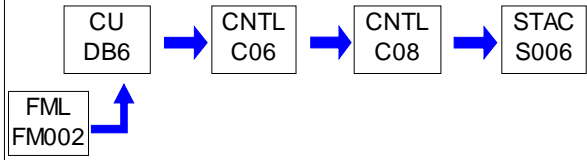
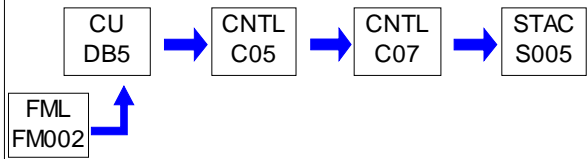
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput		Fuel/Material
035	25 MMBTU/HR BOILER	25.000	MMBTU/HR	
		49,900.000	CF/HR	Natural Gas
CT5	UNIT 5 COMBINED-CYCLE TURBINE WITH HRSG	471.200	MMBTU/HR	
		471,200.000	CF/HR	Natural Gas
		3,259.100	Gal/HR	ULSD
CT6	UNIT 6 COMBINED-CYCLE TURBINE WITH HRSG	471,200.000	CF/HR	Natural Gas
		3,259.100	Gal/HR	ULSD
DB5	DUCT BURNER UNIT 5 HRSG	38.900	MMBTU/HR	
		38,900.000	CF/HR	Natural Gas
DB6	DUCT BURNER UNIT 6 HRSG	38.900	MMBTU/HR	
		38,900.000	CF/HR	Natural Gas
T04	10,000 GAL AMMONIA TANK			
C05	UNIT 5 SELECTIVE CATALYTIC REDUCTION			
C06	UNIT 6 SELECTIVE CATALYTIC REDUCTION			
C07	UNIT 5 CO CATALYST			
C08	UNIT 6 CO CATALYST			
FM002	NATURAL GAS			
FM003	510,000 GAL DISTILLATE FUEL TANK			
S005	UNIT 5 STACK			
S006	UNIT 6 STACK			
S35	BOILER STACK			
Z004	AMMONIA TANK EMISSIONS			

**PERMIT MAPS**



**PERMIT MAPS**



**SECTION B. General State Only 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 in 25 Pa. Code § 121.1.

**#002 [25 Pa. Code § 127.446]****Operating Permit Duration.**

(a) 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.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating 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.

**#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)]****Permit Renewal.**

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

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

(c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). 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.

(d) 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.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) 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 as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

**#004 [25 Pa. Code § 127.703]****Operating Permit Fees under Subchapter I.**

(a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.

(1) For a synthetic minor facility, a fee equal to:

(i) Four thousand dollars (\$4,000) for calendar years 2021—2025.

(ii) Five thousand dollars (\$5,000) for calendar years 2026—2030.

(iii) Six thousand three hundred dollars (\$6,300) for the calendar years beginning with 2031.

**SECTION B. General State Only Requirements**

(2) For a facility that is not a synthetic minor, a fee equal to:

- (i) Two thousand dollars (\$2,000) for calendar years 2021—2025.
- (ii) Two thousand five hundred dollars (\$2,500) for calendar years 2026—2030.
- (iii) Three thousand one hundred dollars (\$3,100) for the calendar years beginning with 2031.

(b) 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.

**#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]****Transfer of Operating Permits.**

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

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

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

**#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]****Inspection and Entry.**

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

(1) Enter at reasonable times upon the permittee's premises where a 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, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any 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, any 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 or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(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.

**#007 [25 Pa. Code §§ 127.441 & 127.444]****Compliance Requirements.**

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

**SECTION B. General State Only Requirements**

- (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 for the source is 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 State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

**#008 [25 Pa. Code § 127.441]****Need to Halt or Reduce Activity Not a Defense.**

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

**#009 [25 Pa. Code §§ 127.442(a) & 127.461]****Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

**#010 [25 Pa. Code § 127.461]****Revising an Operating Permit for Cause.**

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

**#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]****Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:



**SECTION B. General State Only Requirements**

(b) Administrative Amendments. The permittee shall submit the application for administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall submit the application for minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Significant Operating Permit Modifications. The permittee shall submit the application for significant operating permit modifications in accordance with 25 Pa. Code § 127.465.

(e) 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.

**#012 [25 Pa. Code § 127.441]****Severability Clause.**

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

**#013 [25 Pa. Code § 127.449]****De Minimis Emission Increases.**

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. 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.

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

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

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

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.

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

(4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> 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, the regulations thereunder 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, the regulations thereunder or 25 Pa. Code Article III.

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

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

**SECTION B. General State Only Requirements**

(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 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.

(e) 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 (c)(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 this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(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, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

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

**#014 [25 Pa. Code § 127.3]****Operational Flexibility.**

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

(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)

**SECTION B. General State Only Requirements**

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

**#015 [25 Pa. Code § 127.11a]****Reactivation of Sources**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(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).

**#016 [25 Pa. Code § 127.36]****Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

**#017 [25 Pa. Code § 121.9]****Circumvention.**

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 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

**#018 [25 Pa. Code §§ 127.402(d) & 127.442]****Reporting Requirements.**

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) 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 in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

**#019 [25 Pa. Code §§ 127.441(c) & 135.5]****Sampling, Testing and Monitoring Procedures.**

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

**#020 [25 Pa. Code §§ 127.441(c) and 135.5]****Recordkeeping.**

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

- (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 any 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.

**#021 [25 Pa. Code § 127.441(a)]****Property Rights.**

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

**#022 [25 Pa. Code § 127.447]****Alternative Operating Scenarios.**

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION B. General State Only Requirements****#023 [25 Pa. Code §135.3]****Reporting**

(a) If the facility is a Synthetic Minor Facility, 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 of a Synthetic Minor Facility 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.

**#024 [25 Pa. Code §135.4]****Report Format**

If applicable, the 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**

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

- (1) Construction or demolition of buildings or structures
- (2) Grading, paving and maintenance of roads and streets
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and eets.
- (4) Clearing of land
- (5) Stockpiling of materials.
- (6) Open burning operations.
- (7) Sources and classes of sources other than those identified above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (a) The emissions are of minor significance with respect to causing air pollution.
  - (b) 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**

No person may permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Section C, Condition #001 if the emissions are visible at the point the emissions pass outside the person's property.

**# 003 [25 Pa. Code §123.31]****Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated

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

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

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

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

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

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions;
- (3) The emission results from sources specified in 25 Pa. Code Section 123.1(a)(1)-(9).

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

The facility shall not emit pollutants from the following sources in excesses of the following limitations on a 12-month rolling sum.

Compliance with this limit shall include start-up and shut-down emissions

Source	pollutant (Tons /12-month rolling sum)							
	NOx	CO	VOC	SO2	PM10	H2SO4	NH3	PM2.5
Combustion Turbines	46.9	34.7	9.58	26.1	75.1	8.87	27.7	75.1
Steam Boiler/Tanks	1.8	4.2	0.3	0.1	0.4	Neg	0.0	0.40

The Department reserves the right to impose more stringent emission limits based on stack test data.

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

The total fuel consumption of liquid fuel in the two combustion turbines shall not exceed a total of 3,911,000 gallons during any consecutive rolling 12- month period.

**# 008 [25 Pa. Code §129.14]****Open burning operations**

(a) The permittee may not permit the open burning of material in a manner that:

- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
- (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) Exceptions. The requirements above do not apply where the open burning operations result from a fire set for either of the following reasons:

- (1) to prevent or abate a fire hazard, when approved by the Department and set by o under the supervision of a public officer.
- (2) to instruct personnel in fire fighting, when approved by the Department.
- (3) for the prevention and control of disease or pests, when approved by the Department.
- (4) in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) for the burning of domestic refuse, when the fire is on the premise of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.
- (6) for recreational or ceremonial purposes.
- (7) solely for cooking food.

**SECTION C. Site Level Requirements**

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

**II. TESTING REQUIREMENTS.****# 009 [25 Pa. Code §139.1]****Sampling facilities.**

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

**# 010 [25 Pa. Code §139.11]****General requirements.**

(a) As specified in 25 Pa. Code Section 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 Section 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, as a minimum, all of the following:

- (1) A thorough source description, including a description of any air cleaning devices and the flue.
- (2) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature and other conditions which may effect emissions from the process.
- (3) The location of sampling ports.
- (4) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage of CO, CO<sub>2</sub>, O<sub>2</sub> and N<sub>2</sub>), 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 §123.31]****Limitations**

The permittee shall conduct routine inspections of this facility on a weekly basis, when this source is in operation, to determine the presence of malodorous air emissions detectable beyond the boundaries of this facility.

**# 012 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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



**SECTION C. Site Level Requirements****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Continuous emission monitoring system for nitrogen oxides (as NO<sub>x</sub>), carbon monoxide (CO), diluent gas (O<sub>2</sub> or CO<sub>2</sub>), and ammonia must be approved by the Department and installed, operated and maintained in accordance with the requirements of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. Exhaust gas flow rate at all points where gas contaminants are measured shall be monitored by 40 CFR 60 Appendix A Method 19. Proposals containing information as listed in the Phase I section of the Department's Continuous Source Monitoring Manual for CEMs must be submitted at least 3 months prior to the initial start-up of the combustion turbines.

As an alternative to operating a CEM for direct measurement of ammonia slip, the Owner or Operator may substitute an "alternative" monitoring system that will assure compliance with operating permit, if approved by the Department. This alternative monitoring plan must be submitted for approval in conjunction with those for the CEM system.

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

The Owner or Operator shall install and maintain fuel flow monitors that meet the requirements of 40 CFR Part 75.

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

The Owner or Operator shall, at a minimum, record the following:

- a. Monthly fuel consumption rate and 12-month rolling total fuel consumption for each combustion turbine.
- b. Hours of start-up and shutdown period for each turbine.
- c. Monthly hours of operation for each turbine in duct/ non-duct fire.
- d. Monthly emissions of PM 2.5, PM10, SO<sub>2</sub>, NO<sub>x</sub>, CO, H<sub>2</sub>SO<sub>4</sub> and VOC.
- e. 12-month rolling total of the emissions identified in Section C , I Restrictions of this permit.
- f. Results of fuel sampling required as per Section C of this permit.

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

Records required under this operating permit, 40 CFR Part 60 Subpart KKKK and 40 CFR Parts 72 and 75 shall be kept for a period of 5 years and shall be made available to the Department upon request.

- a. The Owner or Operator shall maintain records on all air pollution control system performance evaluations and records of calibration checks, adjustments and maintenance performed on all equipment, which is subject to this operating permit.
- b. The Owner or Operator shall maintain a copy of the manufacturer's recommendation for the two combustion turbines, and air pollution control equipment on-site.
- c. The Owner or Operator shall maintain a copy of the manufacturer's recommendations for all CEMs that are required by this operating permit.
- d. The Owner or Operator shall keep a record of the date of malfunction, the time of the malfunction, the cause of the malfunction, and the action taken to correct the malfunction.

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

The permittee shall report malfunctions to the Department. As defined in 40 CFR Section 60.2 and incorporated by

**SECTION C. Site Level Requirements**

reference in 25 Pa. Code Chapter 122, a malfunction is any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner that may result in an increase in 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.

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

**# 018 [25 Pa. Code §135.3]****Reporting**

The owner or operator shall submit by March 1 of each year, a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

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

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

For any source specified in Section C, Condition #001, the permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land.
- (2) Application of asphalt, oil, or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.
- (5) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

**# 020 [25 Pa. Code §127.25]****Compliance requirement.**

Pursuant to 25 Pa Code Sections 127.25 and 127.444, the Owner or Operator shall construct, operate, and maintain the two (2) combustion turbines, two (2) HRSGs, one (1) steam turbine generator, and air pollution control equipment in accordance with manufacturer's recommendations, as well as good air pollution control practices to ensure compliance with all air quality emission limitations.

**VII. ADDITIONAL REQUIREMENTS.****# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

All emissions shall be determined by the methods found in 40 CFR Part 60, the Plan Approval Application and supplemental materials and Continuous Source Monitoring Manual.

**VIII. COMPLIANCE CERTIFICATION.**

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating



## SECTION C. Site Level Requirements

to State Only General Requirements).

### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Requirements**

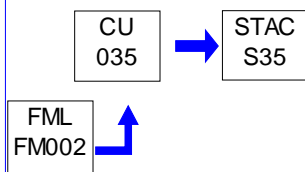
Source ID: 035

Source Name: 25 MMBTU/HR BOILER

Source Capacity/Throughput: 25.000 MMBTU/HR

49,900.000 CF/HR

Natural Gas

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

The source shall comply with the following condition as well as the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- a. The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage.
- b. The permittee shall comply with the recordkeeping and certification requirements in accordance with 40 CFR §§60.46c(e), 60.42c(h) and 60.48c(f)(1). Reports shall be submitted on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period (this does not apply to gas-fired units).
- c. The permittee shall maintain daily fuel consumption records in accordance with 40 CFR §60.48c(g) (this applies to gas units). Records shall be kept for the fuel firing rates of the combustion unit on a monthly basis.
- d. Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR §§60.48c(d), 60.48c(e)(11) and 60.48c(j). The initial semi-annual report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test. Each subsequent report shall be postmarked by the 30th day following the end of the reporting period (this does not apply to gas-fired units).
- e. Pursuant to 40 CFR §60.4, the permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to: Associate Director of Air Enforcement and Compliance Assistance, Mail Code 3AP20 US EPA, Region III 1650 Arch Street Philadelphia PA 19103-2029

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

The source shall be capable of reducing nitrogen oxides (NOx) and carbon monoxide (CO) emissions to or below:

- i. 30 ppmv NOx at 3% O<sub>2</sub> when firing gas;
- ii. 300 ppmv CO at 3% O<sub>2</sub>.

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

**II. TESTING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

At the request of the Department, the permittee shall demonstrate compliance with the emission limitations for NOx, and CO established in Condition #002 for each boiler. The demonstration may include either of the following methods:

- a. Performance stack testing in accordance with applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing).
- b. Portable analyzers approved by the Department.
- c. Recent test data approved by the Department for identical boilers.

If performance source testing according to 25 Pa. Code Chapter 139 (relating to sampling and testing) is chosen for

**SECTION D. Source Level Requirements**

demonstration of compliance, the permittee shall:

- a. Conduct all tests in accordance with the Department's latest Source Testing Manual.
- b. Submit a stack test protocol to the Regional Air Quality Program Manager for approval at least sixty (60) days prior to the stack test.
- c. Notify the Regional Air Quality Program Manager of the date and time of any testing, 30 days prior to the stack test.
- d. Submit two copies of completed stack test reports, including all operating conditions, within 60 days of completion of testing, to the Regional Air Quality Program Manager.

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

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

**III. MONITORING REQUIREMENTS.**

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

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

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

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

The applications and notifications required by 25 Pa. Code § 127.12b shall be submitted to the appropriate Regional Office responsible for issuing permits in the county in which the combustion unit is, or will be, located. As required under § 127.12b the application shall be either hand delivered or transmitted by certified mail return receipt requested.

The permittee shall notify the Department in writing permittees intent to commence operation of source(s) authorized by the Plan Approval at least five working days prior to the completion of construction. The notice shall specify the expected date of completion of construction and date of commencement of operation for the source(s).

The permittee shall notify the Department in writing, within 24 hours of the discovery during a business day or by 5:00 pm on the first business day after a weekend or holiday, of any malfunction of the combustion unit which results in, or may result in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code, Subpart C, Article III (relating to air resources).

**VI. WORK PRACTICE REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Any combustion unit operating under this operating permit shall comply with the terms and conditions of the permit. The combustion unit and any associated air cleaning devices shall be:

- a. Operated in such a manner as not to cause air pollution.
- b. Operated and maintained in a manner consistent with good operating and maintenance practices.
- c. Operated and maintained in accordance with the manufacturers specifications and the applicable terms and conditions of this operating permit.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Any person proposing to install, operate, or modify a combustion unit under this operating permit shall notify the Department using the plan approval application provided by the Department. In accordance with 25 Pa. Code §127.12b (relating to application for use of plan approvals and operating permits), the applicant shall receive written authorization from the Department prior to constructing or operating under this operating permit.

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

This operating permit may be modified, suspended, or revoked if the Department determines that affected combustion unit(s) cannot be adequately regulated under this permit. Authorization to use this operating permit shall be suspended or revoked if the permittee fails to comply with applicable terms and conditions of the operating permit.

Authorization to operate the combustion unit under this operating permit may be suspended, if, at any time, the permittee causes, permits or allows any modification without Department approval (as defined in 25 Pa. Code §121.1) of the combustion unit and any associated air pollution control device covered by this permit. Upon suspension of the authorization, the permittee may not continue to operate or use said combustion unit. If warranted, the Department will require that the combustion unit be permitted under the state operating permit or Title V operating permit requirements in 25 Pa. Code Chapter 127, as appropriate.

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

Nothing in this operating permit relieves the permittee from its obligation to comply with all applicable Federal, state and local laws and regulations.

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

Any stationary air contamination source that is subject to the requirements of 25 Pa. Code Chapter 127, Subchapter D (relating to prevention of significant deterioration) and 25 Pa. Code Chapter 127, Subchapter E (relating to new source review) 25 Pa. Code Chapter 127, Subchapter G (relating to Title V operating permits), or 25 Pa. Code § 129.91 (relating to control of major sources of NO<sub>x</sub> and VOCs), may not operate under this operating permit. Title V facilities may use this operating permit as a plan approval when the major new source review and prevention of significant deterioration requirements are not applicable.

**SECTION D. Source Level Requirements**

Source ID: CT5

Source Name: UNIT 5 COMBINED-CYCLE TURBINE WITH HRSG

Source Capacity/Throughput: 471.200 MMBTU/HR

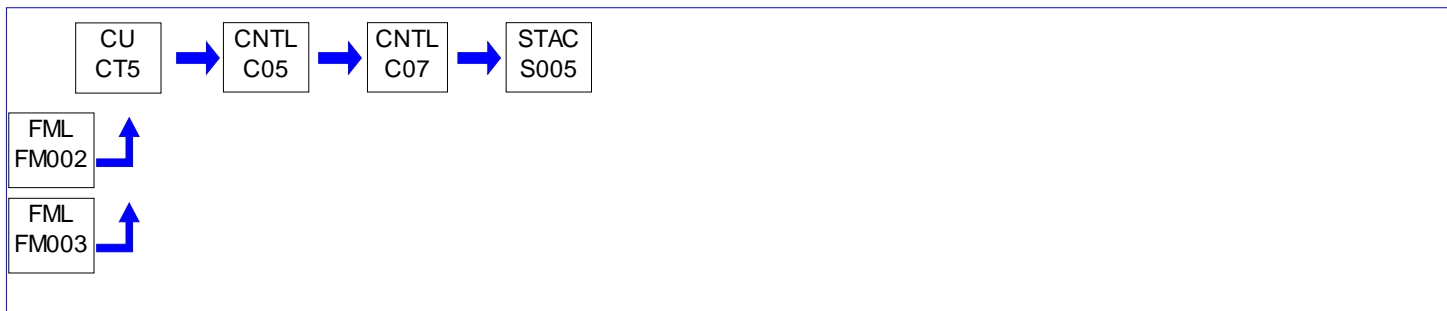
471,200.000 CF/HR

Natural Gas

3,259.100 Gal/HR

ULSD

Conditions for this source occur in the following groups: GROUP 1  
 GROUP 2  
 GROUP 3

**I. RESTRICTIONS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION D. Source Level Requirements**

Source ID: CT6

Source Name: UNIT 6 COMBINED-CYCLE TURBINE WITH HRSG

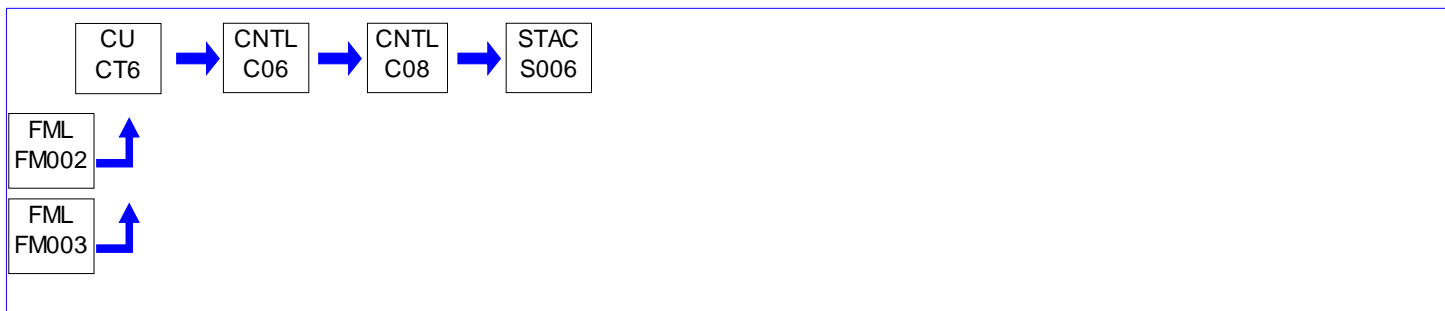
Source Capacity/Throughput: 471,200.000 CF/HR

Natural Gas

3,259.100 Gal/HR

ULSD

Conditions for this source occur in the following groups: GROUP 1  
 GROUP 2  
 GROUP 3

**I. RESTRICTIONS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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



**SECTION D. Source Level Requirements**

Source ID: DB5

Source Name: DUCT BURNER UNIT 5 HRSG

Source Capacity/Throughput: 38.900 MMBTU/HR

38,900.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GROUP 1  
 GROUP 2  
 GROUP 3

**I. RESTRICTIONS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION D. Source Level Requirements**

Source ID: DB6

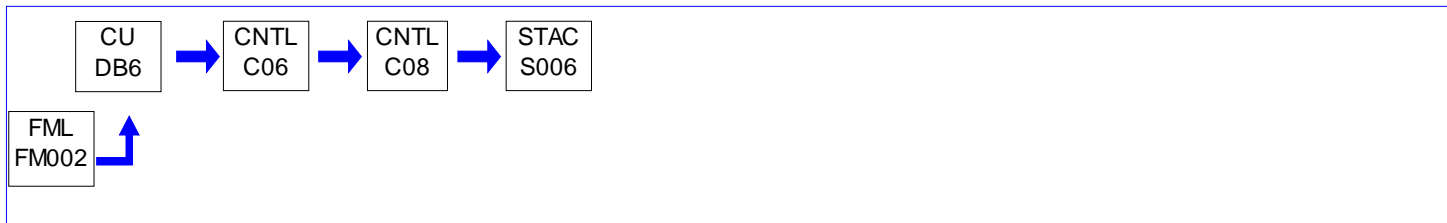
Source Name: DUCT BURNER UNIT 6 HRSG

Source Capacity/Throughput: 38.900 MMBTU/HR

38,900.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GROUP 1  
GROUP 2  
GROUP 3

**I. RESTRICTIONS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

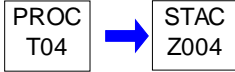
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: T04

Source Name: 10,000 GAL AMMONIA TANK

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1

Group Description: Combustion Turbines With HRSG

Sources included in this group

ID	Name
C05	UNIT 5 SELECTIVE CATALYTIC REDUCTION
C06	UNIT 6 SELECTIVE CATALYTIC REDUCTION
C07	UNIT 5 CO CATALYST
C08	UNIT 6 CO CATALYST
CT5	UNIT 5 COMBINED-CYCLE TURBINE WITH HRSG
CT6	UNIT 6 COMBINED-CYCLE TURBINE WITH HRSG
DB5	DUCT BURNER UNIT 5 HRSG
DB6	DUCT BURNER UNIT 6 HRSG

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.31]****Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

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

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code Section 127.1, the Owner or Operator shall limit the emission of ammonia for each selective catalytic reduction (SCR) system exhaust to 5 ppmvd (one-hour block average), measured dry volume corrected to 15% oxygen. The Department reserves the right to impose a more stringent limit based on the test results.

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

The Department reserves the right to use the CEM data, stack test results, and the operating parameters determined during optimization of the turbines and their associated air cleaning devices to verify emission rates, to establish emission factors, and to develop compliance assurance measures in the Operating Permit.

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

Start-up / Shut-down

The short term emission limitation contained in Condition #005 of this section shall not apply during the start-up and shut-down of the turbines.

Cold-start-up, shall be defined as from initial (cold) firing to combustion turbine steady state operation

Each cold-start-up period shall not exceed 3 (three) hour.

Warm-start-up, shall be defined as from a non-cold start firing to combustion turbine steady state operation

Each warm-start-up period shall not exceed 1 (one) hour.

Shut-down, shall be defined as from when steady state combustion turbine operating load falls below normal operations to cessation of fuel firing.

Each shut-down period shall not exceed 30 (thirty) minutes.

**SECTION E. Source Group Restrictions.**

The emissions from start-up and shut-down shall be included in the 12-month rolling sum.

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

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 10% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 30% at any time.

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

In accordance with 25 Pa Code 127.12b, 127.1, 127.12b(5), and BAT the following emission rates for each turbine with the operation of SCR and CO Catalyst shall not exceed the following:

Pollutant	Normal Operation (15% O2)	Normal Operation (Duct-firing)(15% O2)
NOx (Natural Gas)	2.50 ppmvd	2.90 ppmvd
NOx (Oil)	8.00 ppmvd	8.50 ppmvd
CO (Natural Gas) (>32 Degees F)	4.00 ppmvd	4.00 ppmvd
CO (Natural Gas) (<32 Degrees F)	10.00 ppmvd	10.00ppmvd
The Department reserves the right to chage the CO <32 Degree F limitation at any time)		
CO (Oil)	6.00 ppmvd	6.00 ppmvd
VOC (Natural Gas) (>32 Degees F)	1.20 ppmvd	1.20 ppmvd
VOC (Natural Gas) (<32 Degrees F)	4.00 ppmvd	4.00ppmvd
The Department reserves the right to chage the VOC <32 Degree F limitation at any time)		
VOC (Oil)	1.30 ppmvd	1.30 ppmvd
PM10 (Natural Gas)	0.0141 lb/MMBTU	0.0141 lb/MMBTU
PM10 (Oil)	0.066 lb/MMBTU	0.066 lb/MMBTU
PM2.5 (Natural Gas)	0.0141 lb/MMBTU	0.0141 lb/MMBTU
PM2.5 (Oil)	0.066 lb/MMBTU	0.066 lb/MMBTU
SO2 (Natural Gas)	0.0030 lb/MMBTU	0.0030 lb/MMBTU
SO2 (Oil)	0.0660 lb/MMBTU	0.0660 lb/MMBTU
H2SO4 (Natural Gas)	0.0009 lb/MMBTU	0.0009 lb/MMBTU
H2SO4 (Oil)	0.0200 lb/MMBTU	0.0200 lb/MMBTU

**SECTION E. Source Group Restrictions.**

The Department reserves the right to impose more stringent emission limits based on stack test data.

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

The permittee shall conduct stack testing every (5) years (one time during the term of the permit) to demonstrate compliance with the limitation described in Condition #005 of this section. The Department reserves the right to change the frequency of the testing based upon historical data and the permittee's ability to demonstrate compliance with the limitations established in this permit.

In addition the permittee shall stack test for PM2.5 during the term of the permit.

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

The permittee submitted an alternative plan for direct measurement of ammonia slip from each combustion turbine that will assure compliance with Condition #002, and has been approved by the Department. If this alternative monitoring plan is modified or changes the permittee shall submit the modified or changed plan to the Department for approval in conjunction with those for the continuous emission monitoring system.

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

At least 60 days prior to the test, the Owner or Operator shall submit to the Department for approval the procedures for a test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

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

At least 30 days prior to the test, the Regional Air Quality Program Manager shall be informed of the date and time of the test.

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

Within 60 days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Program Manager for approval.

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner or Operator shall record each cold and warm start-up and each shutdown, including date and times of each event, for the combustion turbines.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**SECTION E. Source Group Restrictions.****VII. ADDITIONAL REQUIREMENTS.****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner or Operator, within one hour of occurrence, shall notify the Department at (570) 826-2511, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within five working days following the incident describing the malfunctions and corrective actions taken. The Department may take enforcement actions for any violations of the applicable standards.

**# 014 [40 CFR Part 72 Regulations on Permits §40 CFR 72.1]****Subpart A--Acid Rain Program General Provisions****Purpose and scope.**

The two (2) combustion turbines are subject to the federal Acid Rain Program requirements specified in Title IV of the Clean Air Act Amendments of 1990 and shall comply with all applicable provisions of Title IV and implementing regulations including:

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

a. Upon start-up, the facility is subject to the applicable requirements in 40 CFR Parts 72 through 78. In addition, the facility is subject to the applicable requirements in 25 Pa. Code Section 127.531, regarding special conditions related to acid rain.

b. The owner(s) and operator(s) of each affected source and each affected unit at the source shall:

i. Operate the unit(s) in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and,

ii. Have an Acid Rain permit.

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 2

Group Description: 40 CFR Part 60 Subpart KKKK Turbine NSPS

Sources included in this group

ID	Name
C05	UNIT 5 SELECTIVE CATALYTIC REDUCTION
C06	UNIT 6 SELECTIVE CATALYTIC REDUCTION
C07	UNIT 5 CO CATALYST
C08	UNIT 6 CO CATALYST
CT5	UNIT 5 COMBINED-CYCLE TURBINE WITH HRSG
CT6	UNIT 6 COMBINED-CYCLE TURBINE WITH HRSG
DB5	DUCT BURNER UNIT 5 HRSG
DB6	DUCT BURNER UNIT 6 HRSG

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [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 (SO<sub>2</sub>)?**

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section.

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO<sub>2</sub> in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output,

or

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

**II. TESTING REQUIREMENTS.****# 002 [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 NO<sub>x</sub> ?**

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

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

(i) Measure the NO<sub>x</sub> concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO<sub>x</sub> emission rate:

"Equation 5"

(Formula omitted...refer to regulation for exact formula notation).

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

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

(i) Measure the NO<sub>x</sub> concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA



**SECTION E. Source Group Restrictions.**

Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NOX emission rate:

"Equation 5"

(Formula omitted...refer to regulation for exact formula notation).

Where:

E = NOX emission rate, in lb/MWh

$1.194 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(NOX)<sub>c</sub> = average NOX concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

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

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

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

(i) You may perform a stratification test for 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 part 75 of this chapter.

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

(A) If each of the individual traverse point NOX concentrations is within  $\pm 10$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 5$  ppm or  $\pm 0.5$  percent CO<sub>2</sub> (or O<sub>2</sub>) 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 less than or equal to 15 ppm @ 15% O<sub>2</sub>, 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  $\pm 2.5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 1$  ppm or  $\pm 0.15$  percent CO<sub>2</sub> (or O<sub>2</sub>) 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.

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- (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.
- (3) If water or steam injection is used to control NOX with no additional post-combustion NOX control and you choose to monitor the steam or water to fuel ratio in accordance with §60.4335, then that monitoring system must be operated concurrently with each EPA Method 20 or EPA Method 7E run and must be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.4320 NOX emission limit.
- (4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOX emission rate at each tested level meets the applicable emission limit in §60.4320.
- (5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.
- (6) The ambient temperature must be greater than 0 °F during the performance test.

Where:

E = NOX emission rate, in lb/MWh

$1.194 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(NOX)<sub>c</sub> = average NOX concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

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

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

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

(i) You may perform a stratification test for 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 part 75 of this chapter.

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

(A) If each of the individual traverse point NOX concentrations is within  $\pm 10$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 5$  ppm or  $\pm 0.5$  percent CO<sub>2</sub>

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(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 less than or equal to 15 ppm @ 15% O<sub>2</sub>, 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  $\pm 2.5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 1$  ppm or  $\pm 0.15$  percent CO<sub>2</sub> (or O<sub>2</sub>) 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.

(3) If water or steam injection is used to control NOX with no additional post-combustion NOX control and you choose to monitor the steam or water to fuel ratio in accordance with §60.4335, then that monitoring system must be operated concurrently with each EPA Method 20 or EPA Method 7E run and must be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.4320 NOX emission limit.

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

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

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

**# 003 [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 §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

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

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

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

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

**# 004 [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?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent SO<sub>2</sub> performance tests shall be

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conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are four methodologies that you may use to conduct the performance tests.

- (1) The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the affected facility. Alternately, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter may be used.
- (2) Periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample may be collected either by an automatic sampling system or manually. For automatic sampling, follow ASTM D5287 (incorporated by reference, see § 60.17) for gaseous fuels or ASTM D4177 (incorporated by reference, see § 60.17) for liquid fuels. For manual sampling of gaseous fuels, follow API Manual of Petroleum Measurement Standards, Chapter 14, Section 1, GPA 2166, or ISO 10715 (all incorporated by reference, see § 60.17). For manual sampling of liquid fuels, follow GPA 2174 or the procedures for manual pipeline sampling in section 14 of ASTM D4057 (both incorporated by reference, see § 60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
  - (i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, D5453, D5623, or D7039 (all of which are incorporated by reference, see §60.17); or
  - (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or GPA 2140, 2261, or 2377 (all of which are incorporated by reference, see §60.17).
- (3) Measure the SO<sub>2</sub> concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO<sub>2</sub> emission rate:

"Equation 6"

(Formula omitted...refer to regulation for exact notation).

Where:

E = SO<sub>2</sub> emission rate, in lb/MWh

$1.664 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(SO<sub>2</sub>)<sub>c</sub> = average SO<sub>2</sub> concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

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

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

(b) [Reserved]

**III. MONITORING REQUIREMENTS.**

**# 005 [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?**

**SECTION E. Source Group Restrictions.**

(a) If you are using water or steam injection to control NOX emissions, you must install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine when burning a fuel that requires water or steam injection for compliance.

(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 (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>)) 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/h).

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

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

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

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

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

**# 007 [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 §60.13(h).

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

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

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

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

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

(1) For simple-cycle operation:

"Equation 1"

(Formula omitted...refer to regulation for exact formula notation).

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 flowmeter(s), e.g., calculated using Equation D-15a in appendix D to part 75 of this chapter, and

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

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

"Equation 2"

(Formula omitted...refer to regulation for exact formula notation).

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

"Equation 3"

(Formula omitted...refer to regulation for exact formula notation).

Where:

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

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mechanical output, in MW,

Q = measured steam flow rate in lb/h,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb, and  $3.413 \times 10^6 =$  conversion from Btu/h to MW.

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

(3) For mechanical drive applications complying with the output-based standard, use the following equation:

"Equation 4"

(Formula omitted...refer to regulation for exact formula notation).

Where:

E = NOX emission rate in lb/MWh,

(NOX)<sub>m</sub> = NOX emission rate in lb/h,

BL = manufacturer's base load rating of turbine, in MW, and

AL = actual load as a percentage of the base load.

(g) For simple cycle units without heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 4-hour rolling average basis, as described in §60.4380(b)(1).

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

**# 008 [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 §§60.4335 and 60.4340 must be monitored during the performance test required under §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

**SECTION E. Source Group Restrictions.**

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 part 75 of this chapter and that have state approval to use the low mass emissions methodology in §75.19 or the NOX emission measurement methodology in appendix E to part 75, you may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a QA plan, as described in §75.19(e)(5) or in section 2.3 of appendix E to part 75 of this chapter and section 1.3.6 of appendix B to part 75 of this chapter.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4360]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I determine the total sulfur content of the turbine's combustion fuel?**

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

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for units located in continental areas and 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/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 SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas or 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

**# 011 [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



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controls in accordance with §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 §60.4355.

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.****# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What reports must I submit?**

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

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

**# 013 [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 §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

(a) For turbines using water or steam to fuel ratio monitoring:

(1) An excess emission is any unit operating hour for which the 4-hour rolling average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.4320, as established during the performance test required in §60.8. Any unit operating hour in which no water or steam is injected into the turbine when a fuel is being burned that requires water or steam injection for NOX control will also be considered an excess emission.

(2) A period of monitor downtime is any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

(3) Each report must include the average steam or water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.

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

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

(2) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOX concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam

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pressure, or megawatts. 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.

**# 014 [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 SO<sub>2</sub>?**

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 paragraph (a) of this section. 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.

**# 015 [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 §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

**VI. WORK PRACTICE REQUIREMENTS.**

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

(1) Determine compliance with the applicable NOX emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or

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(2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

**VII. ADDITIONAL REQUIREMENTS.**

**# 017 [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?**

Good air pollution control practices shall be followed during startup, shutdown, or malfunction of the equipment and control equipment covered under this permit.

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Group Name: GROUP 3

Group Description: Interstate Pollution Transport Reduction Requirements

Sources included in this group

ID	Name
C05	UNIT 5 SELECTIVE CATALYTIC REDUCTION
C06	UNIT 6 SELECTIVE CATALYTIC REDUCTION
C07	UNIT 5 CO CATALYST
C08	UNIT 6 CO CATALYST
CT5	UNIT 5 COMBINED-CYCLE TURBINE WITH HRSG
CT6	UNIT 6 COMBINED-CYCLE TURBINE WITH HRSG
DB5	DUCT BURNER UNIT 5 HRSG
DB6	DUCT BURNER UNIT 6 HRSG

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.102]****Source NOx allowance requirements and NOx allowance control period.**

The owner or operator or each NOx affected source shall, by December 31 of each calendar year, hold a quantity of NOx allowances meeting the requirements of 123.110(a) (relating to source compliance requirements) in the source's current year NATS account that is equal to or greater than the total NOx emitted from the source during that year's NOx allowance control period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.****# 002 [25 Pa. Code §145.6]****Standard requirements.**

(1) The owners and operators and the NOx authorized account representative of each NOx budget source and each NOx budget unit at the source shall comply with the monitoring requirements of 145.70-145.76 (relating to recordkeeping and recording requirements).

(2) The emissions measurements recorded and reported in accordance with 145.70-145.76 shall be used to determine compliance by the unit with the NOx budget emissions limitation under subsection (c).

**# 003 [25 Pa. Code §145.74.]****Recordkeeping and reporting.**

Monitoring plans.

(1) The owner or operator of a unit subject to an acid rain emissions limitation shall comply with 40 CFR 75.62 (relating to monitoring plan), except that the monitoring plan shall also include all of the information required by 40 CFR Part 75, Subpart H.

(2) The owner or operator of a unit that is not subject to an acid rain emissions limitation shall comply with requirements of 40 CFR 75.62, except that the monitoring plan is only required to include the information required by 40 CFR Part 75, Subpart H.

**IV. RECORDKEEPING REQUIREMENTS.****# 004 [25 Pa. Code §145.6]****Standard requirements.**

Recordkeeping and reporting requirements.

**SECTION E. Source Group Restrictions.**

(1) Unless otherwise provided, the owners and operators of the NOx budget source and each NOx budget unit at the source shall maintain at a central location and provide upon request by the Department or the NOx Budget Administrator the following documents for 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Department or the Administrator.

(i) The account certificate of representation for the NOx authorized account representative for the source and each NOx budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 145.13 (relating to account certificate of representation). The certificate and documents shall be retained beyond the 5-year period until the documents are superseded because of the submission of a new account certificate of representation changing the NOx authorized account representative.

(ii) The emissions monitoring information, in accordance with 145.70-145.76. To the extent that 145.70-145.76 provides for a 3-year period for recordkeeping, the 3-year period applies.

(iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the NOx Budget Trading Program.

(iv) Copies of the documents used to complete any submission under the NOx Budget Trading Program or to demonstrate compliance with the NOx Budget Trading Program.

(2) The NOx authorized account representative of a NOx budget source and each NOx budget unit at the source shall submit the reports and compliance certifications required under the NOx Budget Trading Program, including those under 145.30, 145.31, 145.70-145.76 and 145.80-145.88.

**V. REPORTING REQUIREMENTS.****# 005 [25 Pa. Code §145.30.]****Compliance certification report.**

(a) Applicability and deadline. For each control period in which one or more NOx budget units at a source are subject to the NOx budget emissions limitation, the NOx authorized account representative of the source shall submit to the Department and the NOx Budget Administrator by November 30 of that year, a compliance certification report for the source covering all of the units.

(b) Contents of report. The NOx authorized account representative shall include in the compliance certification report under subsection (a) the following elements, in a format prescribed by the Department, concerning each unit at the source and subject to the NOx budget emissions limitation for the control period covered by the report:

(1) Identification of each NOx budget unit.

(2) At the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under 145.54 (relating to compliance) for the control period.

(3) At the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with 145.70-145.76 (relating to recordkeeping and reporting requirements), the percentage of allowances that is to be deducted from each unit's compliance account under 145.54(e).

(4) The compliance certification under subsection (c).

(c) Compliance certification. In the compliance certification report under subsection (a), the NOx authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx Budget Trading Program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the NOx Budget Trading Program applicable to the unit, including the following:

(1) Whether the unit was operated in compliance with the NOx budget emissions limitation.

**SECTION E. Source Group Restrictions.**

(2) Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains the information necessary to attribute NOx emissions to the unit, in accordance with 145.70-145.76.

(3) Whether all the NOx emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with 145.70-145.76. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions has been made.

(4) Whether the facts that form the basis for certification under 145.70-145.76 of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under 145.70-145.76, if any, has changed.

(5) If a change is required to be reported under paragraph (4), specify the nature of the change, the reason for the change, when the change occurred and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

**# 006 [25 Pa. Code §145.74.]****Recordkeeping and reporting.**

The authorized account representative shall submit to the Department and NOx Budget Administrator a quarterly emission report in accordance with the requirements of Section 145.74(d)

The NOx authorized account representative shall submit to the Department and NOx Budget Administrator a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored.

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.****# 007 [25 Pa. Code §145.10.]****Authorization and responsibilities of the NOx authorized account representative.**

(a) Except as provided under 145.11 (relating to alternate NOx authorized account representative), each NOx budget source, including all NOx budget units at the source, shall have only one NOx authorized account representative, with regard to all matters under the NOx Budget Trading Program concerning the source or any NOx budget unit at the source.

(b) The NOx authorized account representative of the NOx budget source shall be selected by an agreement binding on the owners and operators of the source and all NOx budget units at the source.

(c) Upon receipt by the Department and the NOx Budget Administrator of a complete account certificate of representation under 145.13 (relating to account certificate of representation), the NOx authorized account representative of the source shall represent and, by his representations, actions, inactions or submissions, legally bind each owner and operator of the NOx budget source represented and each NOx budget unit at the source in all matters pertaining to the NOx Budget Trading Program, notwithstanding any agreement between the NOx authorized account representative and the owners and operators. The owners and operators shall be bound by any decision or order issued to the NOx authorized account representative by the Department, the Administrator or a court regarding the source or unit.

(d) A NOx Allowance Tracking System account will not be established for a NOx budget unit at a source, until the Department and the NOx Budget Administrator have received a complete account certificate of representation under 145.13 for a NOx authorized account representative of the source and the NOx budget units at the source.

(e) Document submission requirements are as follows:

**SECTION E. Source Group Restrictions.**

(1) Each submission under the NOx Budget Trading Program shall be submitted, signed and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) The Department and NOx Budget Administrator will accept or act on a submission made on behalf of owner or operators of a NOx budget source or a NOx budget unit only if the submission has been made, signed and certified in accordance with paragraph (1).

**# 008 [25 Pa. Code §145.6]****Standard requirements.**

NOx requirements.

(1) The owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under 145.54 (relating to compliance), as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with 145.70-145.76 plus any amount necessary to account for actual heat input under 145.42(e) (relating to NOx allowance allocations) for the control period or to account for excess emissions for a prior control period under 145.54(d) or to account for withdrawal from the NOx Budget Trading Program, or a change in regulatory status, of a NOx budget opt-in unit under 145.86 or 145.87 (relating to opt-in source withdrawal from NOx Budget Trading Program; and opt-in source change in regulatory status).

(2) Each ton of NOx emitted in excess of the NOx budget emissions limitation shall constitute a separate violation of this subchapter and the act.

(3) A NOx budget unit shall be subject to paragraph (1) starting on May 1, 2003, or the date on which the unit commences operation, whichever is later.

(4) NOx allowances shall be held in, deducted from or transferred among NOx Allowance Tracking System accounts in accordance with 145.40-145.43, 145.50-145.57, 145.60-145.62 and 145.80-145.88.

(5) A NOx allowance may not be deducted, to comply with paragraph (1), for a control period in a year prior to the year for which the NOx allowance was allocated.

(6) A NOx allowance allocated by the Department under the NOx Budget Trading Program is a limited authorization to emit 1 ton of NOx in accordance with the NOx Budget Trading Program. No provision of the NOx Budget Trading Program or an exemption under 145.4(b) or 145.5 (relating to applicability; and retired unit exemption) and no provision of law limit the authority of the United States or the Department to terminate or limit the authorization.

(7) A NOx allowance allocated by the Department under the NOx Budget Trading Program does not constitute a property right.

**# 009 [25 Pa. Code §145.6]****Standard requirements.**

Excess emissions. The owners and operators of a NOx budget unit that has excess emissions in any control period shall do the following:

(1) Surrender the NOx allowances required for deduction under 145.54(d)(1).

**SECTION E. Source Group Restrictions.**

(2) Pay any fine, penalty or assessment or comply with any other remedy imposed under 145.54(d)(3) or the act.

**# 010 [25 Pa. Code §145.74.]****Recordkeeping and reporting.**

The NOx authorized account representative shall submit an application to the Department within 45 days after completing all initial certification or recertification tests required under 145.71 (relating to initial certification and recertification procedures) including the information required under 40 CFR Part 75, Subpart H.

**# 011 [25 Pa. Code §145.90.]****Emission reduction credit provisions.**

NOx budget units may create, transfer and use emission reduction credits (ERCs) in accordance with Chapter 127 (relating to construction, modification, reactivation and operation of sources) and this section. ERCs may not be used to satisfy NOx allowance requirements.





## SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

(a) The Synthetic Minor Operating Permit application was received on September 5, 2024. The annual operating permit maintenance fee shall be submitted to the Department in accordance with 25 Pa. Code, Chapter 127, Section 127.703. The annual maintenance fees are due no later than December 31, annually.

(b) Plan Approvals include:

40-328-003A

40-328-006

40-00005A

40-00005C

40-00005D



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

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