



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Southwest Regional Office

Air Quality Program



PLAN APPROVAL PERMIT # 30-00233B

HILLTOP ENERGY CTR LLC
Cumberland Township, Greene County

Issue Date: December 1, 2017

Expiration Date: December 1, 2020



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

PLAN APPROVAL

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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 construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval 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 plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 30-00233B

Federal Tax Id - Plant Code: 47-3881930-1

Owner Information

Name: HILLTOP ENERGY CTR LLC
Mailing Address: 747 3RD AVENUE 2ND FL
NEW YORK, NY 10017

Plant Information

Plant: HILLTOP ENERGY CENTER LLC
Location: 30 Greene County 30906 Cumberland Township
SIC Code: 4911 Trans. & Utilities - Electric Services

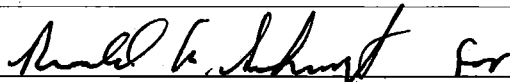
Responsible Official

Name: RICHARD RADINI
Title: MANAGING DIR
Phone: (516) 353 - 8702

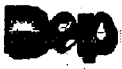
Plan Approval Contact Person

Name: RICHARD RADINI
Title: MANAGING DIR
Phone: (516) 353 - 8702

[Signature]



MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION



Plan Approval Description

This plan approval is to allow construction and temporary operation of a combined cycle natural gas-fired power plant by Hill Top Energy Center, LLC located in Cumberland Township, Greene County.

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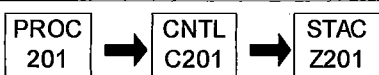
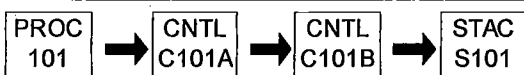
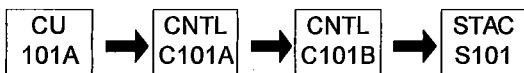
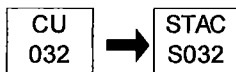
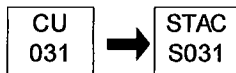
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SourceID	SourceName	Capacity/Throughput	Fuel/Material
031	AUXILIARY BOILER	42.000 MMBTU/HR	
		40.856 MCF/HR	Natural Gas
032	FUEL GAS HEATER	6.400 MMBTU/HR	
		6.226 MCF/HR	Natural Gas
101A	DUCT BURNERS UNIT #1	981.400 MMBTU/HR	
		954.000 MCF/HR	Natural Gas
101	COMBUSTION TURBINE UNIT #1	3,509.000 MMBTU/HR	
		3,413.000 MCF/HR	Natural Gas
201	COOLING TOWER		
301	EMERGENCY GENERATOR ENGINE (2,682 HP)	18.770 MMBTU/HR	
		135.000 Gal/HR	Diesel Fuel
302	FIRE PUMP ENGINE (422 HP)	2.950 MMBTU/HR	
		21.200 Gal/HR	Diesel Fuel
401	COMPONENTS IN NATURAL GAS SERVICE		
402	CIRCUIT BREAKERS (SF6)		
C101A	OXIDATION CATALYST		
C101B	SELECTIVE CATALYTIC REDUCTION		
C201	DRIFT ELIMINATORS		
S031	AUXILIARY BOILER STACK		
S032	FUEL GAS HEATER STACK		
S101	COMBUSTION TURBINE W DUCT BURNERS UNIT #1 STACK		
S301	EMERGENCY GENERATOR ENGINE STACK		
S302	FIRE PUMP ENGINE STACK		
Z201	FUGITIVE EMISSIONS (COOLING TOWER)		
Z401	FUGITIVE EMISSIONS (COMPONENT LEAKS)		
Z402	FUGITIVE EMISSIONS (CIRCUIT BREAKERS)		

PERMIT MAPS





PERMIT MAPS

PROC 301 → STAC S301

PROC 302 → STAC S302

PROC 401 → STAC Z401

PROC 402 → STAC Z402

**#001 [25 Pa. Code § 121.1]****Definitions**

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

#002 [25 Pa. Code § 127.12b (a) (b)]**Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]**Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]**Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]**Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the



competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

(a) 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.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.



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

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

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

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) 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.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

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

#012 [25 Pa. Code § 127.12(9) & 40 CFR Part 68]

Risk Management

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:
 - (1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:



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

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

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

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

#013 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

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

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

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

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

(1) Construction or demolition of buildings or structures.

(2) Grading, paving and maintenance of roads and streets.

(3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

(8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in § § 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery, and coke pushing operations).

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

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

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

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

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

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

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



(3) Paving and maintenance of roadways.

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

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

003 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]

Limitations

The permittee may not allow the emission into the outdoor atmosphere of any malodorous air contaminants from any source, in such a manner that the malodors are detectable outside the permittee's property.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Visible emission limitations shall not apply in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from sources specified in §123.1(1)-(9).
- (d) N/A

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emissions from all sources and associated air cleaning devices installed and operated under this authorization shall not exceed any of the following on a 12-month rolling sum basis:

- (a) Nitrogen Oxides (NOx): 173.10 tpy
- (b) Carbon Monoxide (CO): 160.14 tpy
- (c) Sulfur Dioxide (SO₂): 23.42 tpy
- (d) Volatile Organic Compounds (VOC): 60.11 tpy
- (e) Particulate Matter (PM): 111.92 tpy
- (f) Particulate Matter with an aerodynamic diameter less than 10 microns (PM₁₀): 110.25 tpy
- (g) Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM_{2.5}): 108.18 tpy
- (h) Sulfuric Acid Mist (H₂SO₄): 13.06 tpy
- (i) Ammonia (NH₃): 136.46 tpy
- (j) Total Hazardous Air Pollutants (HAPs): 18.41 tpy
- (k) Formaldehyde: 5.78 tpy
- (l) Greenhouse Gases, expressed as Carbon Dioxide Equivalent (CO_{2e}): 2,324,350 tpy

II. TESTING REQUIREMENTS.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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



such time as it notifies the company that testing is required.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Performance testing shall be conducted as follows:

(a) The Permittee shall submit two hard copies and one electronic copy of a pre-test protocol to the Department for review at least 60 days prior to the performance of any EPA reference method stack test. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

(b) The Permittee shall notify the Regional Air Quality Manager and Division of Source Testing and Monitoring at least 15 days prior to any performance test so that an observer may be present at the time of the test. This notification may be sent by email. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Two (2) hard copies and one (1) electronic copy of a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.

(d) Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

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

(2) Permit number(s) and condition(s) which are the basis for the evaluation.

(3) Summary of results with respect to each applicable permit condition.

(4) Statement of compliance or non-compliance with each applicable permit condition.

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

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

(g) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all hard copy submittals shall be sent to the Pennsylvania Department of Environmental Protection, Air Quality Program, 400 Waterfront Drive, Pittsburgh, PA 15222 with deadlines verified through document postmarks. Electronic submittals shall be sent to RA-epstacktesting@pa.gov. Alternatively, electronic copies may be provided on a CD along with hard copy submittals.

(h) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

III. MONITORING REQUIREMENTS.

009 [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.

010 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Periodic monitoring shall be conducted as follows:

(a) The permittee shall submit two hard copies and one electronic copy of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used.

011 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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

IV. RECORDKEEPING REQUIREMENTS.**# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall maintain the following comprehensive and accurate records:

- (a) Facility-wide emissions on a 12-month rolling basis for NO_x, CO, SO_x, VOC, PM, PM₁₀, PM_{2.5}, H₂SO₄, NH₃, HAPs, HCHO, hexane, and CO_{2e}.
- (b) Amount of fuel used by each combustion unit, engine, and turbine on a 12-month rolling basis.
- (c) Hours of operation of each air contamination source on a 12-month rolling basis.
- (d) Results of facility-wide inspections for visible stack emissions, fugitive emissions, and any potentially objectionable odors at the property line including the date, time, name, and title of the observer; along with any corrective action taken as a result.
- (e) A description of testing methods, results, all operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards
- (f) Copies of the manufacturer's recommended maintenance schedule for each air contamination source and air cleaning device.
- (g) All maintenance performed on each air contamination source and air cleaning device.
- (h) Copies of the current, valid purchase contract, tariff sheet, or transportation contract obtained from the natural gas supplier with the sulfur content of the natural gas.
- (i) Results of the annual natural gas sulfur content analyses.
- (j) Amount of sulfur hexafluoride (SF₆) dielectric fluid added to each circuit breaker unit on a monthly basis.
- (k) The date and time that each alarm associated with the circuit breaker is activated, the corrective action taken to remedy the problem associated with each alarm, and the date the corrective action remedied the problem.
- (l) The concentration of ammonia in the aqueous ammonia storage tank.

013 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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

V. REPORTING REQUIREMENTS.**# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Annual emissions reporting shall be conducted as follows:

- (a) The permittee shall submit by March 1 of each year, a source report for the preceding calendar year for all sources authorized under this plan approval. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) The source report; in a form as the Department may prescribe; for classes or categories of sources; shall show the actual emissions of carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter less than 10 micrometers in diameter (PM10), particulate matter less than 2.5 micrometers in diameter (PM2.5), sulfur dioxide (SO2), volatile organic compounds (VOC), total hazardous air pollutants (HAP), speciated individual HAP emissions (per the Department's Emissions Inventory Reporting Instructions), sulfuric acid mist (H2SO4), ammonia (NH3) and greenhouse gases, expressed as CO2e for each reporting period. A description of the method used to calculate the emissions and the time period over which the calculation is based shall be included. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

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

015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Malfunction reporting shall be conducted as follows:

(a) The Owner/Operator shall report each malfunction that occurs at this Facility that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizen complaints to the Department. For purpose of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or source to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Examples of malfunctions may include, but are not limited to: large dust plumes, heavy smoke, a spill or release that results in a malodor that is detectable outside the property of the person on whose land the source is being operated.

(b) When the malfunction poses an imminent and substantial danger to the public health and safety, potential harm to the environment, the permittee shall report the incident to the Department within one hour of discovery. The permittee shall also notify the Department within one hour, when corrective measures have been accomplished.

All other malfunctions that must be reported under subsection (a) shall be reported to the Department no later than the next business day.

(c) Initial reporting of the malfunction shall identify the following items to the extent known:

- (1) Name and location of the facility;
- (2) Nature and cause of the malfunction;
- (3) Time when the malfunction or breakdown was first observed;
- (4) Expected duration of increased emissions; and
- (5) Estimated rate of emissions.

(d) Malfunctions shall be reported to the Department by e-mail (addresses will be provided by the Department) or at the following address:

PA DEP
Office of Air Quality
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4000

(e) If requested by the Department, the permittee shall submit a full written report to the Department including final determinations of the items identified in (c) and the corrective measures taken on the malfunction. The report shall be submitted within 15 days of the Department's request or accomplishing corrective measures, whichever is later.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

The Facility is subject New Source Performance Standards from 40 CFR Part 60 Subparts Dc, III, KKKK, and TTTT. In



accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals, and other communications regarding the affected sources shall be forwarded to the Department at the address listed below unless otherwise noted.

Pennsylvania Department of Environmental Protection
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Copies of all requests, reports, applications, submittals, and other communications shall also be submitted to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessible at <https://cdx.epa.gov/> unless electronic reporting is not available, in which case a copy shall be sent to the following address:

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

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]

Subpart A--General Provisions

Addresses of State air pollution control agencies and EPA Regional Offices.

The Facility is subject National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ. In accordance with 40 CFR §63.13, copies of all requests, reports, applications, submittals, and other communications regarding the affected sources shall be forwarded to the Department at the address listed below unless otherwise noted.

Pennsylvania Department of Environmental Protection
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Copies of all requests, reports, applications, submittals, and other communications shall also be submitted to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessible at <https://cdx.epa.gov/> unless electronic reporting is not available, in which case a copy shall be sent to the following address:

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

VI. WORK PRACTICE REQUIREMENTS.

**# 018 [25 Pa. Code §127.12b]
Plan approval terms and conditions.**

The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this Plan Approval in accordance with the manufacturer's specifications and recommended maintenance schedules.

**# 019 [25 Pa. Code §127.12b]
Plan approval terms and conditions.**

The concentration of ammonia in the aqueous ammonia storage tank shall be less than 20%.

VII. ADDITIONAL REQUIREMENTS.

**# 020 [25 Pa. Code §127.12b]
Plan approval terms and conditions.**

In accordance with 25 Pa. Code § 127.201 through § 127.217, the permittee shall secure 200 tons of NOx emission

reduction credits (ERCs) and 70 tons of VOC ERCs. The ERCs shall be properly generated, certified by the Department, and processed through the registry no later than the date approved by the Department for commencement of operation of the proposed facility. This facility may not commence operation until the required emissions reductions are certified and registered by the Department and included in a plan approval.

021 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with all applicable requirements of New Source Performance Standards from 40 CFR Part 60 Subparts Dc, Iiii, KKKK, and TTTT and National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subpart ZZZZ.

022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with all applicable requirements under 40 CFR Parts 72, 73, and 75 related to the Acid Rain Program.

023 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with the applicable requirements of the Cross-State Air Pollution Rule (CSAPR) codified in 40 CFR Part 97 Subparts AAAAA-CCCCC, as applicable, by the compliance dates therein specified.

024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with all applicable requirements under 40 CFR Part 98 related to the Mandatory Greenhouse Gas Reporting Rule.

025 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This plan approval is to allow construction and temporary operation of a combined cycle natural gas-fired power plant by Hill Top Energy Center, LLC located in Cumberland Township, Greene County.

026 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Air contamination sources and air cleaning devices authorized for construction and temporary operation under this plan approval include:

- One (1) 3,509 MMBtu/hr HHV General Electric International, Inc. (GE) model no. GE 7HA.02 natural gas-fired combined cycle combustion turbine equipped with a heat recovery steam generator (HRSG) with supplemental 981.4 MMBtu/hr HHV natural gas fired duct burners; controlled by selective catalytic reduction and oxidation catalyst.
- One (1) 42 MMBtu/hr HHV natural gas-fired auxiliary boiler.
- One (1) 6.4 MMBtu/hr HHV natural gas-fired fuel gas heater.
- One (1) 2.95 MMBtu/hr HHV, 422 hp diesel-fired emergency firewater pump engine.
- One (1) 18.77 MMBtu/hr HHV, 2,682 hp diesel-fired emergency generator engine.
- Eight-cell, mechanical draft, evaporative cooling tower controlled by drift eliminators.
- Miscellaneous components in natural gas service, and SF6 containing circuit breakers; controlled by leak detection and repair (LDAR).

027 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Upon determination by the permittee that the air contamination sources and air cleaning devices covered by this plan approval are in compliance with all conditions of the plan approval, the permittee shall contact the Department's technical reviewer and schedule the Initial Operating Permit Inspection.

028 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Upon completion of the Initial Operating Permit Inspection and determination by the Department that the permittee is in compliance with all conditions of the plan approval, the owner or operator shall submit the Title V operating permit application within 120 days after the Department provides notice to the owner or operator that the application is due.



029 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall submit requests to extend the temporary operation periods at least 15 days prior to the expiration date of any authorized period of temporary operation.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.



Source ID: 031

Source Name: AUXILIARY BOILER

Source Capacity/Throughput:

42.000 MMBTU/HR

40.856 MCF/HR

Natural Gas

CU
031STAC
S031**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

(a) NOx: 0.011 lb/MMBtu HHV.

(b) CO: 0.037 lb/MMBtu HHV.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

II. TESTING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 180 days after initial startup of the auxiliary boiler, or on an alternative schedule as approved by the Department, the permittee shall conduct EPA reference method stack testing for NOx and CO in accordance with the requirements of 25 Pa. Code §139.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.

The Owner/Operator shall comply with the applicable fuel usage recordkeeping requirements specified in 40 CFR §60.48c.

V. REPORTING REQUIREMENTS.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.

The Owner/Operator shall comply with the applicable notification requirements specified in 40 CFR §60.48c.

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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



Source ID: 032

Source Name: FUEL GAS HEATER

Source Capacity/Throughput:

6.400 MMBTU/HR

6.226 MCF/HR

Natural Gas

CU
032STAC
S032**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emissions from the dew point heater shall not exceed the following:

(a) NO_x: 0.011 lb/MMBtu HHV.

(b) CO: 0.037 lb/MMBtu HHV.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 180 days after initial startup of the fuel gas heater, or on an alternative schedule as approved by the Department, the permittee shall conduct portable analyzer testing for NO_x and CO in accordance with the requirements of 25 Pa. Code §139 and applicable EPA conditional test methods or ASTM D6522-00.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



Source ID: 101

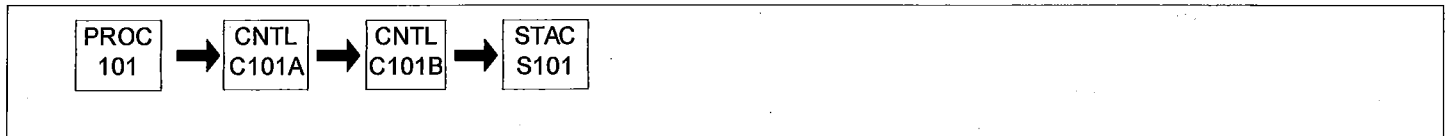
Source Name: COMBUSTION TURBINE UNIT #1

Source Capacity/Throughput: 3,509.000 MMBTU/HR

3,413.000 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: CEMS
 COMBINED CYCLE TURBINE
 NSPS SUBPART KKKK
 NSPS SUBPART TTTT

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

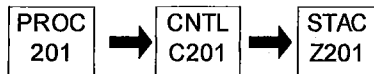
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



Source ID: 201

Source Name: COOLING TOWER

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Total dissolved solids (TDS) of the cooling tower water shall not exceed 4,000 ppm.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall install and maintain drift eliminators with a manufacturer's guaranteed drift rate of less than 0.0005% of the circulating water flow rate.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall sample, analyze, and record the circulating water TDS content on a monthly basis.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall continuously monitor and record the circulating water and make up water flow rates on a 24-hour average.

IV. RECORDKEEPING REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:

- (a) Monthly circulating water TDS content.
- (b) Daily circulating water and make up water flow rates.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



Source ID: 301

Source Name: EMERGENCY GENERATOR ENGINE (2,682 HP)

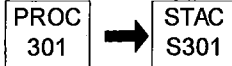
Source Capacity/Throughput:

18.770 MMBTU/HR

135.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: DIESEL ENGINES
NSPS SUBPART IIII

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



Source ID: 302

Source Name: FIRE PUMP ENGINE (422 HP)

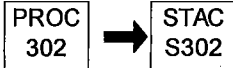
Source Capacity/Throughput:

2.950 MMBTU/HR

21.200 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: DIESEL ENGINES
NSPS SUBPART IIII

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

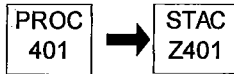
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



Source ID: 401

Source Name: COMPONENTS IN NATURAL GAS SERVICE

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall implement a methane (CH₄) leak detection and repair program which includes audible, visual, and olfactory (AVO) inspections conducted on a monthly basis on the natural gas piping components. Records of each inspection shall be maintained in a log and, at a minimum, identify the date, time, name and title of the observer, along with any corrective action taken. Leaks shall be repaired as expeditiously as practicable, but no later than fifteen (15) calendar days after the leak is detected unless the owner or operator must purchase parts or the replacement is technically infeasible without process shutdown or would be unsafe to repair during operation of the unit.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

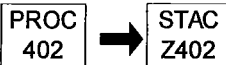
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

Source ID: 402

Source Name: CIRCUIT BREAKERS (SF6)

Source Capacity/Throughput:

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

- (a) Circuit breakers are to be state-of-the-art sealed enclosed-pressure circuit breakers equipped with low-pressure alarms that are triggered when less than 10% of the SF6 by weight has escaped.
- (b) When alarms are triggered, the facility shall take corrective action as soon as practicable to repair the circuit breaker units to a like-new state to prevent the emission of SF6 to the maximum extent possible.
- (c) Leaks shall be repaired no later than fifteen (15) calendar days after the leak is detected.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



Group Name: CEMS
 Group Description: Combined Cycle Combustion Turbine CEMS
 Sources included in this group

ID	Name
101	COMBUSTION TURBINE UNIT #1
101A	DUCT BURNERS UNIT #1

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

CEMS approval:

(a) Initial Application (Phase I)

A proposal containing information as listed in the Phase I section of the Department's Continuous Source Monitoring Manual for each CEMS must be submitted at least 180 days prior to the initial startup date of the combustion turbine.

(b) Performance Testing (Phase II)

Testing as listed in the Phase II section of the Department's Continuous Source Monitoring Manual must be completed for the CEMS no later than 180 days after initial startup date of the combustion turbine and no later than 60 days after each combustion turbine achieves normal process capacity.

(c) Final Approval (Phase III)

The final report of testing as listed in the Phase III section of the Department's Continuous Source Monitoring Manual must be submitted no later than 60 days after completion of testing. An operating permit will not be issued until each CEMS has received Phase III approval, in writing from the Department. Until Phase III is granted by the Department, operation shall be covered solely by condition of a plan approval.

(d) Each Phase I, Phase II, and Phase III submittal must be provided to the Department through CEMDPS*Online.

(e) Extension of any Phase deadline may be granted only with appropriate justification and written Department approval.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Continuous Emission Monitoring System (CEMS) Requirements:

The following continuous emission monitoring systems (CEMS) must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the "Submittal and Approval", "Record Keeping and Reporting", and "Quality Assurance" requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001), and 40 CFR Part 60 Subparts A and KKKK, and 40 CFR Part 75, as applicable.

(a) CEMS #1

(1) Source to be monitored: Source IDs 101 and 101A

(2) Parameter to be reported: NOx

(3) Units of measurement to be reported: ppmvd and lb/hr

(4) Moisture basis of measurement to be reported: Dry



(5) Correction basis of measurements to be reported: 15% O₂; correction to 15% O₂ is not permitted for the 30-operating day operating hour average per 40 CFR §60.4350(c).

(6) Data substitution required: 40 CFR Part 60 Subpart KKKK, 40 CFR Part 75, and Revision No. 8 of the Department's continuous Source Monitoring Manual (274-0300-001) as applicable.

(7) Emission Standards:

(i) Emission Standard #1

1. Emission Standard Averaging Period Description: 1-hour average, block
2. Emission Standard Value: 2.0 ppmvd (normal) and 34.76 lb/hr (normal)
3. Emission Standard Direction: Violation if greater than emission standard value.
4. Variable Emission Standard: N/A
5. Emission Standard and/or Status: N/A

(b) CEMS #2

- (1) Source to be monitored: Source IDs 101 and 101A
- (2) Parameter to be reported: CO
- (3) Units of measurement to be reported: ppmvd and lb/hr
- (4) Moisture basis of measurement to be reported: Dry
- (5) Correction basis of measurements to be reported: 15% O₂.
- (6) Data substitution required: Revision No. 8 of the Department's continuous Source Monitoring Manual (274-0300-001) as applicable.
- (7) Emission Standards:

(i) Emission Standard #2

1. Emission Standard Averaging Period Description: 1-hour average, block
2. Emission Standard Value: 2.0 ppmvd (normal) and 21.12 lb/hr (normal)
3. Emission Standard Direction: Violation if greater than emission standard value.
4. Variable Emission Standard: N/A
5. Emission Standard and/or Status: N/A

(c) CEMS #3

- (1) Source to be monitored: Source IDs 101 and 101A
- (2) Parameter to be reported: NH₃
- (3) Units of measurement to be reported: ppmvd
- (4) Moisture basis of measurement to be reported: Dry
- (5) Correction basis of measurements to be reported: 15% O₂.
- (6) Data substitution required: Revision No. 8 of the Department's continuous Source Monitoring Manual (274-0300-001) as applicable.
- (7) Emission Standards:

(i) Emission Standard #3

1. Emission Standard Averaging Period Description: 3-hour average, block
2. Emission Standard Value: 5.0 ppmvd (normal)
3. Emission Standard Direction: Violation if greater than emission standard value.
4. Variable Emission Standard: N/A
5. Emission Standard and/or Status: N/A

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

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), the "Record Keeping and Reporting" requirements in Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001), and the recordkeeping requirements established in 40 CFR §§60.7 and 60.13, 40 CFR Part 60 Subpart KKKK, and Part 75 Subpart F, as



applicable.

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

V. REPORTING REQUIREMENTS.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), the "Record Keeping and Reporting" requirements as established in Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001), and the reporting requirements established 40 CFR §§60.13 and 60.19, 40 CFR Part 60 Subpart KKKK, and Part 75 Subpart G, as applicable.

- (a) The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.
- (b) Initial quarterly reports following system certification shall be submitted to the Department within 35 days following the date upon which the Department notifies the owner or operator, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.
- (c) Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.
- (d) Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this authorization, unless approved in advance by the Department in writing.

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

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

CEMS Data Availability Standards.

CEMS #1, CEMS #2, CEMS #3

(a) Data Availability Standard

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

- (i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies, shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001).
- (ii) In each calendar quarter, at least 95% of the hours shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001).
- (2) For purposes of calculating data availability, "process down" time, as specified in Revision No. 8 of the Department's Continuous Source Monitoring Manual (274-0300-001), shall be considered valid time.

(3) Emission Standard(s) to which data availability standard applies:

- (i) NO_x: ppmvd, lb/hr



(ii) CO: ppmvd, lb/hr

(4) Each 3-hour block average subject to an emissions standard shall be comprised of three 1-hour averages of normal source operation. Emissions occurring during exempt periods of operation (including startup, shutdown, and malfunction) are to be excluded from such 3-hour averages but must be included when calculating 1-year sum tons per year emissions.

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



Group Name: COMBINED CYCLE TURBINE
 Group Description: Combined Cycle Combustion Turbine
 Sources included in this group

ID	Name
101	COMBUSTION TURBINE UNIT #1
101A	DUCT BURNERS UNIT #1

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

At all times, including startup and shutdown, emissions from the combined cycle combustion turbine, Source IDs 101 and 101A, shall not exceed the following on a 12-month rolling basis:

- (a) Nitrogen Oxides (NOx): 169.36 tpy
- (b) Carbon Monoxide (CO): 151.41 tpy
- (c) Volatile Organic Compounds (VOC): 59.31 tpy
- (d) Total Particulate Matter (PM): 105.28 tpy
- (e) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM10): 105.28 tpy
- (f) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM2.5): 105.28 tpy
- (g) Sulfuric Acid Mist (H2SO4): 13.04 tpy
- (h) Sulfur Dioxide (SO2): 23.12 tpy
- (i) Formaldehyde (HCHO): 5.77 tpy
- (j) Total HAPs: 18.38 tpy
- (k) Greenhouse Gases, expressed as Carbon Dioxide Equivalent (CO2e): 2,298,774 tpy

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

During normal operation, emissions from the combined cycle combustion turbine, Source IDs 101 and 101A, shall not exceed [25 Pa. Code §127.12b]:

- (a) Nitrogen Oxides (NOx): 2.0 ppmvd @ 15% O2
NOx: 34.76 lb/hr

Compliance Method/Averaging Period
 Initial: U.S. EPA Reference Method 7E
 Continuous: 1-hour block

- (b) Carbon Monoxide (CO): 2.0 ppmvd @ 15% O2
CO: 21.12 lb/hr

Compliance Method/Averaging Period
 Initial: U.S. EPA Reference Method 10
 Continuous: 1-hour block

- (c) Volatile Organic Compounds (VOC), as methane: 1.0 ppmvd @ 15% O2 without duct burners and 2.0 ppmvd @ 15% O2



with duct burners

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Methods 18 and 25A

Continuous: 3-hour block based on initial test and VOC and CO correlation

(d) Total Particulate Matter (PM):

0.0072 lb/MMBtu HHV

PM: 34.19 lb/hr

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

Continuous: 12-month rolling

(e) Total Particulate Matter with an aerodynamic diameter less than 10 microns (PM10):

0.0072 lb/MMBtu HHV

PM10: 34.19 lb/hr

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Methods 201/201A or equivalent and Method 202

Continuous: 12-month rolling

(f) Total Particulate Matter with an aerodynamic diameter less than 2.5 microns (PM2.5):

0.0072 lb/MMBtu HHV

PM2.5: 34.19 lb/hr

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Methods 201/201A or equivalent and Method 202

Continuous: 12-month rolling

(g) Sulfuric Acid Mist (H₂SO₄): 0.0007 lb/MMBtu HHV

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Method 8

Continuous: 12-month rolling

(h) Sulfur Dioxide (SO₂): 0.0011 lb/MMBtu HHV

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Method 6C

Continuous: 12-month rolling

(i) Formaldehyde (HCHO): 91 ppbvd @ 15% O₂

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Method 320, or ASTM D6348-12

Continuous: 3-hour block based on initial test and HCHO to CO correlation.

(j) Ammonia Slip (NH₃): 5.0 ppmvd @ 15% O₂ on a 3-hour average.

Compliance Method/Averaging Period

Initial: U.S. EPA Conditional Test Method CTM-027

Continuous: 3-hour block

(k) Greenhouse Gases: 879 lbs CO₂e/MWh (gross).

Compliance Method/Averaging Period

Initial: U.S. EPA Reference Method 3A

Continuous: 12-month rolling

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

- (a) Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any 1 hour.
- (b) Equal to or greater than 20% for a period or periods aggregating more than 3 minutes during startup and shutdown.
- (c) Equal to or greater than 30% at any time.

Fuel Restriction(s).

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Average fuel sulfur content shall not exceed 0.4 gr/100 scf natural gas on an annual basis.

Operation Hours Restriction(s).

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Definitions:

- (a) Startup is defined as the time from gas turbine ignition to HRSG stack NOx and CO steady state emission compliance.
- (b) Shutdown is defined as the time that either HRSG stack NOx or CO emissions exceed steady-state compliance following a normal stop signal to the termination of fuel flow to the gas turbine off. Shutdown shall not exceed 12 minutes per occurrence.
- (c) Normal operation is defined as all times except startup, shutdown and malfunction.
- (d) Cold Startup is defined as a CTG/HRSG unit startup more than 72 hours after shutdown. Cold startup period shall not exceed 55 minutes per occurrence.
- (e) Warm Startup is defined as a CTG/HRSG unit startup between eight (8) and 72 hours after shutdown. Warm startup periods shall not exceed 40 minutes per occurrence.
- (f) Hot Startup is defined as a CTG/HRSG unit startup less than eight (8) hours after shutdown. Hot startup shall not exceed 20 minutes per occurrence.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the best available technology requirements of 25 Pa. Code 127.1 and 127.12, the total hours of startups and shutdowns for the combined-cycle power block shall not exceed 162.2 hours in any 12-month rolling period.

Control Device Efficiency Restriction(s).

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The combined cycle combustion turbine shall be equipped with dry low-NOx burners, selective catalytic reduction, and oxidation catalysts.

II. TESTING REQUIREMENTS.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 180 days after initial startup, or on an alternative schedule as approved by the Department, the permittee shall conduct EPA reference method stack testing for VOC, formaldehyde, PM (filterable and condensable), PM10 (filterable and condensable), PM2.5 (filterable and condensable), sulfuric acid mist, SO₂, and carbon dioxide (CO₂) in accordance with the

requirements of 25 Pa. Code §139 and applicable EPA reference methods

009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall conduct subsequent EPA reference method stack testing for VOC, formaldehyde, and PM (filterable and condensable) no less often than every five years after initial testing. The frequency of such subsequent testing may be altered based on the test results and only with prior written approval from the Department.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §123.51]

Monitoring requirements

Monitoring requirements

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

011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

CO₂ emissions from the combined cycle combustion turbine and associated duct-fired HRSG shall be monitored using the methods in 40 CFR Part 75.13.

IV. RECORDKEEPING REQUIREMENTS.

012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:

- (a) Monthly heat input and power output on a 12-month rolling basis.
- (b) The date, time, and duration of each startup and shutdown event on a 12-month rolling basis.
- (c) Ammonia injection rate.
- (d) Duct burner hours of operation on a 12-month rolling basis.
- (e) Requirements established in 25 Pa. Code §139 Subchapter C, requirements for source monitoring for stationary sources.
- (f) Requirements in the most recent version of the Department's Continuous Source Monitoring Manual.



V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

<p># 013 [25 Pa. Code §127.12b] Plan approval terms and conditions. Within 30 days of the selection of the specific manufacturer and model of the control devices (SCR and oxidation catalyst), the permittee shall submit the specifications to the Department.</p>
<p># 014 [25 Pa. Code §127.12b] Plan approval terms and conditions. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart KKKK.</p>
<p># 015 [25 Pa. Code §127.12b] Plan approval terms and conditions. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart TTTT.</p>



Group Name: DIESEL ENGINES
 Group Description: Emergency Generator Engine and Fire Pump Engine
 Sources included in this group

ID	Name
301	EMERGENCY GENERATOR ENGINE (2,682 HP)
302	FIRE PUMP ENGINE (422 HP)

I. RESTRICTIONS.

Emission Restriction(s).

# 001	[25 Pa. Code §127.12b] Plan approval terms and conditions. The emergency diesel generator shall be a certified Tier II engine.
# 002	[25 Pa. Code §127.12b] Plan approval terms and conditions. The emergency fire pump engine shall be a certified Tier III engine.
# 003	[25 Pa. Code §127.12b] Plan approval terms and conditions. The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following: (a) Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any one hour. (b) Equal to or greater than 30% at any time.

Fuel Restriction(s).

# 004	[25 Pa. Code §127.12b] Plan approval terms and conditions. Sulfur content of the diesel fuel combusted by the emergency diesel generator engine and fire pump engine shall not exceed 15 ppm.
# 005	[25 Pa. Code §127.12b] Plan approval terms and conditions. The cetane index or aromatic content of the diesel fuel shall have: (a) A minimum cetane index of 40; or (b) A maximum aromatic content of 35 volume percent.

Operation Hours Restriction(s).

# 006	[25 Pa. Code §127.12b] Plan approval terms and conditions. Operation of the emergency diesel generator engine and fire pump engine shall not exceed 100 hours each on a 12-month rolling basis except for emergency use.
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II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.****# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.**# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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



Group Name: NSPS SUBPART III
 Group Description: Compression Ignition Internal Combustion Engines Subpart III
 Sources included in this group

ID	Name
301	EMERGENCY GENERATOR ENGINE (2,682 HP)
302	FIRE PUMP ENGINE (422 HP)

I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

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

(a) N/A

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

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

(d) N/A

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

(f) N/A

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

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

Fuel Restriction(s).

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

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

(a) N/A

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



be used until depleted.

(c) [Reserved]

(d) N/A

(e) N/A

II. TESTING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4212]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

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

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

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

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

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) N/A

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

III. MONITORING REQUIREMENTS.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

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

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

(b) N/A

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

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

(a) N/A

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

(c) N/A

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

(1) The report must contain the following information:

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

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

(iii) Engine site rating and model year.

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

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

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

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

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

VI. WORK PRACTICE REQUIREMENTS.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]

Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

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

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

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

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

(b) N/A

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

(d) N/A

(e) N/A

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

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

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

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

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance



and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) N/A

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

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

VII. ADDITIONAL REQUIREMENTS.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

Am I subject to this subpart?

Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this



section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) N/A

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

- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(b) N/A

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

(d) N/A

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

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4208]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

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

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

(b) N/A

(c) N/A

(d) N/A

(e) N/A

(f) N/A

(g) N/A

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

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

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What parts of the General Provisions apply to me?

What parts of the General Provisions apply to me?

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



Group Name: NSPS SUBPART KKKK
 Group Description: Combined Cycle Combustion Turbine Subpart KKKK
 Sources included in this group

ID	Name
101	COMBUSTION TURBINE UNIT #1
101A	DUCT BURNERS UNIT #1

I. RESTRICTIONS.

Emission Restriction(s).

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

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

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

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

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4340]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

(a) If you are not using water or steam injection to control NO_x emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, you must resume annual performance tests.



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

- (1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345, or
- (2) N/A

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

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

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

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

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

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

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4350]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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

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

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

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

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

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

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

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

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

(3) N/A

(g) N/A

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

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

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.

007 [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?

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

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

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

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

008 [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?

What reports must I submit?

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

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

VI. WORK PRACTICE REQUIREMENTS.

009 [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?

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

(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.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



Group Name: NSPS SUBPART TTTT
 Group Description: Combined Cycle Combustion Turbine Subpart TTTT
 Sources included in this group

ID	Name
101	COMBUSTION TURBINE UNIT #1
101A	DUCT BURNERS UNIT #1

I. RESTRICTIONS.

Emission Restriction(s).

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5520]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What CO2 emission standard must I meet?
 What CO2 emission standard must I meet?
 The permittee shall comply with the applicable emission standards specified in 40 CFR §60.5520.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5535]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
How do I monitor and collect data to demonstrate compliance?
 How do I monitor and collect data to demonstrate compliance?
 The permittee shall comply with the applicable monitoring requirements specified in 40 CFR §60.5535.

IV. RECORDKEEPING REQUIREMENTS.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5560]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What records must I maintain?
 What records must I maintain?
 The permittee shall comply with the applicable recordkeeping requirements specified in 40 CFR §60.5560.

V. REPORTING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5550]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What notifications must I submit and when?
 What notifications must I submit and when?
 The permittee shall comply with the applicable notification requirements specified in 40 CFR §60.5550.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5555]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What reports must I submit and when?
 What reports must I submit and when?
 The permittee shall comply with the applicable reporting requirements specified in 40 CFR §60.5555.

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5509]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
Am I subject to this subpart?**

Am I subject to this subpart?

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

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

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

(b) N/A

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5515]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
Which pollutants are regulated by this subpart?**

Which pollutants are regulated by this subpart?

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

(b) PSD and title V thresholds for greenhouse gases. (1) For the purposes of 40 CFR 51.166(b)(49)(ii), with respect to GHG emissions from affected facilities, the "pollutant that is subject to the standard promulgated under section 111 of the Act" shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in §51.166(b)(48) of this chapter and in any SIP approved by the EPA that is interpreted to incorporate, or specifically incorporates, §51.166(b)(48).

(2) For the purposes of 40 CFR 52.21(b)(50)(ii), with respect to GHG emissions from affected facilities, the "pollutant that is subject to the standard promulgated under section 111 of the Act" shall be considered to be the pollutant that otherwise is subject to regulation under the Act as defined in §52.21(b)(49) of this chapter.

(3) For the purposes of 40 CFR 70.2, with respect to greenhouse gas emissions from affected facilities, the "pollutant that is subject to any standard promulgated under section 111 of the Act" shall be considered to be the pollutant that otherwise is "subject to regulation" as defined in 40 CFR 70.2.

(4) For the purposes of 40 CFR 71.2, with respect to greenhouse gas emissions from affected facilities, the "pollutant that is subject to any standard promulgated under section 111 of the Act" shall be considered to be the pollutant that otherwise is "subject to regulation" as defined in 40 CFR 71.2.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5525]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What are my general requirements for complying with this subpart?**

What are my general requirements for complying with this subpart?

The permittee shall comply with the applicable general requirements specified in 40 CFR §60.5525.



**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5570]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units**

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

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

The permittee shall comply with the applicable general provisions specified in 40 CFR §60.5560.



No Alternative Operations exist for this Plan Approval facility.



No emission restrictions listed in this section of the permit.



This is a major Title V facility for NO_x, CO, PM₁₀, PM_{2.5}, VOC, and CO_{2e} and as such, actual emissions may equal or exceed the following in any consecutive 12-month period.

100.0 tons of NO_x (NITROGEN OXIDES)

100.0 tons of CO (CARBON MONOXIDE)

100.0 tons of PM-10 (PARTICULATE MATTER < 10 MICRONS)

100.0 tons of PM-2.5 (PARTICULATE MATTER < 2.5 MICRONS)

50.0 tons of VOC (VOLATILE ORGANIC COMPOUNDS)

100,000 tons of CO_{2e} (CARBON DIOXIDE EQUIVALENTS)

This is a natural minor facility with respect to SO_x, Individual HAP, and Total HAP and as such, actual emissions can not equal or exceed the following in any consecutive 12-month period:

100.0 tons of SO_x (SULFUR OXIDES)

10.0 tons of ANY INDIVIDUAL HAP (HAZARDOUS AIR POLLUTANT)

25.0 tons of ALL HAP COMBINED (HAZARDOUS AIR POLLUTANT)

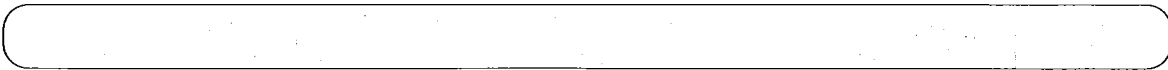
Miscellaneous air contamination sources and equipment accounted for in this Plan Approval, but without specific requirements include:

One (1) 3,000 gallon emergency generator diesel storage tank.

One (1) 500 gallon firewater pump diesel storage tank.

One (1) 35,000 gallon 19% aqueous ammonia storage tank.

Lubricating oil storage tanks.



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

