



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Southwest Regional Office

Air Quality Program



PLAN APPROVAL PERMIT # 63-00922D

ROBINSON POWER CO LLC
Robinson Township, Washington County

Issue Date: October 27, 2017

Revision Date: October 4, 2018

Revision Type: Modification

Expiration Date: October 27, 2020



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

| | | | |
|----------------|------------------|------------------|------------------|
| Issue Date: | October 27, 2017 | Effective Date: | October 4, 2018 |
| Revision Date: | October 4, 2018 | Expiration Date: | October 27, 2020 |
| Revision Type: | Modification | | |

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to 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. 63-00922D

Federal Tax Id - Plant Code: 20-1046636-1

| |
|---|
| Owner Information |
| Name: ROBINSON POWER CO LLC Mailing Address: 563 ROUTE 18 PO BOX 127 BURGETTSTOWN, PA 15021-2120 |
| Plant Information |
| Plant: ROBINSON POWER CO/BEECH HOLLOW ENERGY Location: 63 Washington County 63951 Robinson Township SIC Code: 4911 Trans. & Utilities - Electric Services |
| Responsible Official |
| Name: RAYMOND J BOLOGNA Title: PRINCIPAL Phone: (724) 947 - 3301 |
| Plan Approval Contact Person |
| Name: RAYMOND J BOLOGNA Title: PRINCIPAL Phone: (724) 947 - 3301 |
| [Signature]  MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION |



[Plan Approval Description](#)

This Plan Approval is to allow the construction and temporary operation of a natural gas-fired combined cycle power plant to be located in Robinson Township, Washington County.



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents
Plan Approval Inventory List

Section B. General Plan Approval Requirements

- #001 Definitions
- #002 Future Adoption of Requirements
- #003 Plan Approval Temporary Operation
- #004 Content of Applications
- #005 Public Records and Confidential Information
- #006 Plan Approval terms and conditions.
- #007 Transfer of Plan Approvals
- #008 Inspection and Entry
- #009 Plan Approval Changes for Cause
- #010 Circumvention
- #011 Submissions
- #012 Risk Management
- #013 Compliance Requirement

Section C. Site Level Plan Approval Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level Plan Approval Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements



SECTION A. Table of Contents

- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

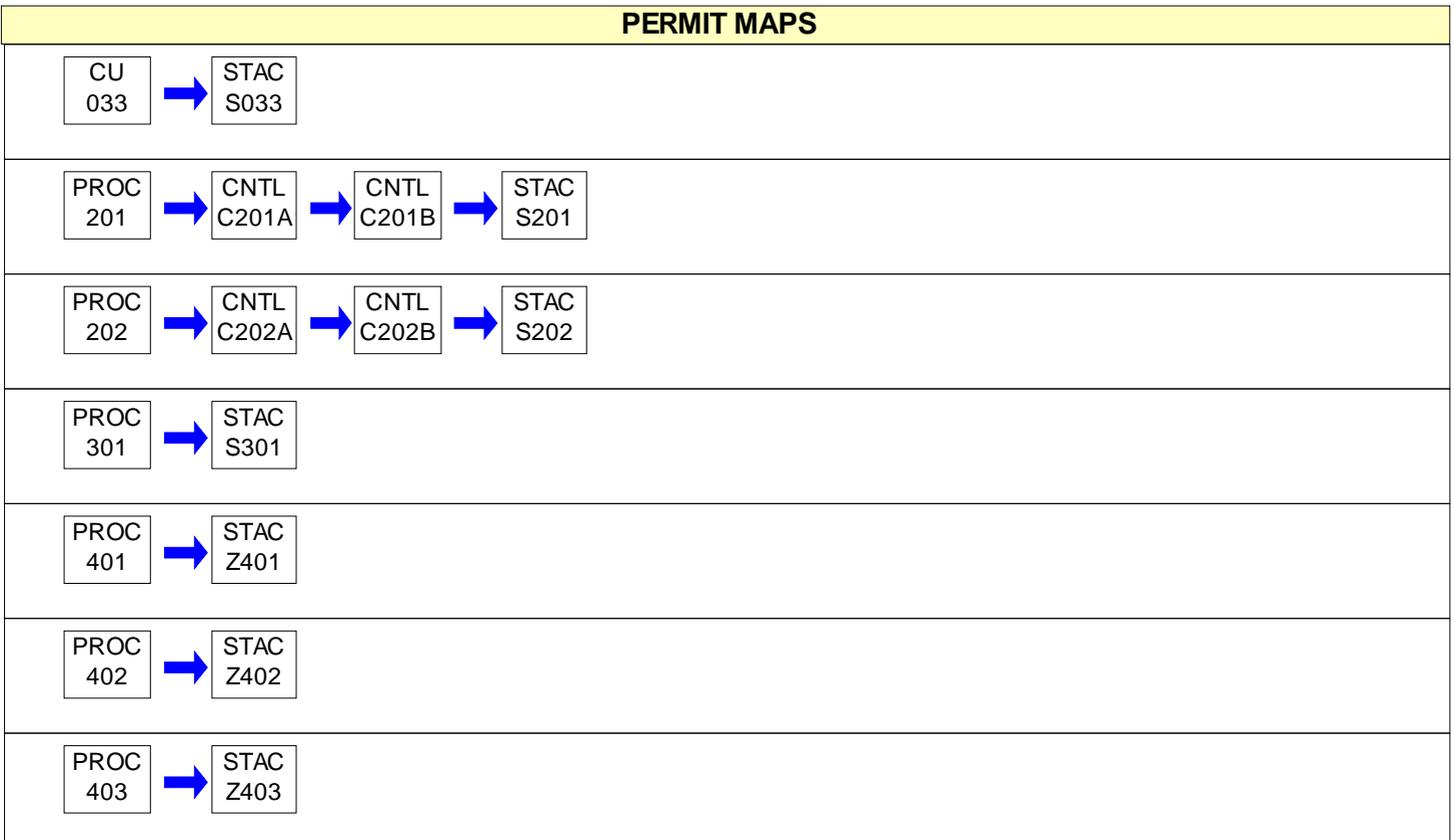
Section G. Emission Restriction Summary

Section H. Miscellaneous

SECTION A. Plan Approval Inventory List

| Source ID | Source Name | Capacity/Throughput | Fuel/Material |
|-----------|--|---------------------|---------------|
| 033 | NATURAL GAS-FIRED AUXILIARY BOILER (30 MMBTU/HR) | 30.000 MMBTU/HR | |
| | | 29.400 MCF/HR | Natural Gas |
| 201 | COMBUSTION TURBINE UNIT #1 | 3,051.000 MMBTU/HR | |
| | | 3.360 MMCF/HR | Natural Gas |
| 202 | COMBUSTION TURBINE UNIT #2 | 3,051.000 MMBTU/HR | |
| | | 3.360 MMCF/HR | Natural Gas |
| 301 | DIESEL-FIRED FIRE PUMP ENGINE (411 BHP) | 21.400 Gal/HR | Diesel Fuel |
| 401 | COMPONENTS IN NATURAL GAS SERVICE | | |
| 402 | CIRCUIT BREAKERS (SF6) | | |
| 403 | FACILITY ROADWAYS | | |
| C201A | OXIDATION CATALYST | | |
| C201B | SELECTIVE CATALYTIC REDUCTION | | |
| C202A | OXIDATION CATALYST | | |
| C202B | SELECTIVE CATALYTIC REDUCTION | | |
| S033 | AUXILIARY BOILER STACK | | |
| S201 | COMBUSTION TURBINE UNIT #1 STACK | | |
| S202 | COMBUSTION TURBINE UNIT #2 STACK | | |
| S301 | FIRE PUMP ENGINE STACK | | |
| Z401 | FUGITIVE EMISSIONS (COMPONENT LEAKS) | | |
| Z402 | FUGITIVE EMISSIONS (CIRCUIT BREAKERS) | | |
| Z403 | FUGITIVE EMISSIONS (FACILITY ROADWAYS) | | |

PERMIT MAPS



**SECTION B. General Plan Approval Requirements****#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

**SECTION B. General Plan Approval Requirements**

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.

**SECTION B. General Plan Approval Requirements**

(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:

**SECTION B. General Plan Approval Requirements**

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

(2) The permittee shall submit any additional relevant information requested by the Department or 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.

**SECTION C. Site Level Plan Approval Requirements****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.

**SECTION C. Site Level Plan Approval Requirements**

(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 Owner/Operator may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside of the property of the Facility.

005 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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

- a. Nitrogen Oxides (NOx) – 190.44 tons
- b. Carbon Monoxide (CO) – 142.42 tons
- c. Particulate Matter (PM) – 112.98 tons
- d. Particulate Matter with aerodynamic diameter less than 10 microns (PM10) – 112.87 tons
- e. Particulate Matter with aerodynamic diameter less than 2.5 microns (PM2.5) – 112.85 tons
- f. Sulfur Oxides (SOx) – 15.42 tons
- g. Sulfuric Acid Mist (H2SO4) – 7.67 tons
- h. Volatile Organic Compounds (VOC) – 45.42 tons
- i. Hazardous Air Pollutants (HAP) – 12.40 tons
- j. Formaldehyde (HCHO) – 4.40 tons
- k. Ammonia (NH3) – 170.13 tons
- l. Greenhouse Gases (GHG) as Carbon Dioxide Equivalents (CO2e) – 2,931,104 tons

006 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Visible emission limitations shall not apply when the emission results from sources specified in 25 Pa. Code §123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) (Additional authority for this condition is derived from 25 Pa. Code §123.42).

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

Open burning operations:

- a. Air basins. N/A
- b. Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
 - 1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
 - 2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the

**SECTION C. Site Level Plan Approval Requirements**

open burning is being conducted.

- 3) The emissions interfere with the reasonable enjoyment of life or property.
- 4) The emissions cause damage to vegetation or property.
- 5) The emissions are or may be deleterious to human or animal health.

c. Exceptions. The requirements of subsections a. and b. do not apply where the open burning operations result from:

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

d. Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

- 1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor - A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes - Trees, shrubs and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

- 2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

- i. Air curtain destructors shall be used when burning clearing and grubbing wastes.
- ii. Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction, modification, reactivation and operation of sources).
- iii. Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.
- iv. The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

- 3) N/A

- 4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in that chapter.

Fuel Restriction(s).

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Sulfur content of the natural gas fuel combusted at this facility shall not exceed 0.2 grains per 100 dscf.

II. TESTING REQUIREMENTS.

009 [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 Owner/Operator's operating permit, the Owner/Operator may be required to conduct test methods and procedures deemed

**SECTION C. Site Level Plan Approval Requirements**

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.

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

Performance testing shall be conducted as follows (Additional authority for this condition is derived from 25 Pa. Code §139.11):

a. The Owner/Operator 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. The Owner/Operator 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. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

b. The Owner/Operator 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. Pursuant to 40 CFR Part 60.8(a), 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.**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Visible emissions may be measured using either of the following:

- a. A device approved by the Department and maintained to provide accurate opacity measurements.

SECTION C. Site Level Plan Approval Requirements

b. Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of devices approved by the Department.

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

The Owner/Operator shall conduct a facility-wide inspection at a minimum of once per day while the Facility is in operation. This inspection is to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §§123.1 or 123.2, and malodors prohibited under 25 Pa. Code §123.31. Observations shall be conducted for the presence of the following:

- a. Visible stack emissions;
- b. Fugitive emissions; and
- c. Potentially objectionable odors.

If visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent; the Owner/Operator 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.**# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall maintain the following comprehensive and accurate records:

- a. Emissions (expressed in tons) of NO_x, CO, PM, PM₁₀, PM_{2.5}, SO_x, H₂SO₄, VOC, Total HAP, Individual HAP, NH₃, and CO_{2e} on a 12-month rolling sum basis.
- b. Maintenance procedures and schedules for each air contamination source and air cleaning device authorized under this plan approval.
- c. Maintenance conducted on each air contamination source and air cleaning device authorized under this plan approval.
- d. Current grab sample data that demonstrates that sulfur content of the natural gas fuel received at the facility does not exceed 0.2 grains per 100 dscf. The grab sample shall be taken at least once per quarter and determined via laboratory analysis using ASTM D5504 (or equivalent test method).
- e. Inspections for visible stack emissions, fugitive emissions, and potentially objectionable odors including the date, time, name, and title of the observer, along with any corrective action taken as a result.

014 [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.**# 015 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Annual emission reporting shall be conducted as follows (Additional authority for this condition is derived from 25 Pa. Code §135.3):

- a. The Owner/Operator shall submit to the Department by March 1 of each year, a source report for the preceding calendar year for all sources authorized under this Plan Approval and which operated during the previous calendar year.
- b. The source report; in a form as the Department may prescribe; for classes or categories of sources; shall show the actual emissions of NO_x, CO, VOC, SO_x, PM₁₀, PM_{2.5}, HAP (per the Department's Emissions Inventory Reporting Instructions), and GHG (including but not limited to CO₂, CH₄, and N₂O) 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 report shall also contain a certification by a company officer or the plant manager that the information contained in the report is accurate.

**SECTION C. Site Level Plan Approval Requirements**

c. A source Owner/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.

016 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Owner/Operator shall provide EPA with the notifications required by 40 CFR Part 60 Subpart A and 40 CFR Part 63 Subpart A.

017 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Malfunction notification and reporting shall be conducted as follows:

a. For purpose of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control or monitoring equipment, or the unauthorized operation of a source that may result in an increase in the emission of air contaminants above allowable levels. 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 a malfunction poses an imminent and substantial danger to the public health and safety or to the environment, the County Emergency Management Agency shall be notified by telephone and the Department shall be notified by telephone or email no later than one hour after discovery of that malfunction. Notification to the Department shall include the items identified in f. to the extent known.

c. For any other malfunction, the Department shall be notified by telephone or email no later than the next business day after discovery of that malfunction. The notification shall include the items identified in f. to the extent known.

d. When a malfunction is corrected, the Department shall be notified by telephone or email immediately.

e. Subsequent to a malfunction, the Owner/Operator shall submit a full written report to the Department including the items identified in f. and corrective measures taken on the malfunction, within 15 days, if requested.

f. The notification and report shall describe the:

- i. Name and location of the facility;
- ii. Nature and cause of the malfunction or breakdown;
- iii. Time when the malfunction or breakdown was first observed;
- iv. Expected duration of excess emissions; and
- v. Estimated rate of emissions.

g. Malfunction telephone notifications and written reports shall be submitted to the Department at the following address:

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

Email addresses and alternative telephone numbers for notification purposes may be provided to the Owner/Operator by the Department, or approved by the Department upon request from the Owner/Operator.

018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]**Subpart A - General Provisions****Address.**

The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subparts Dc, IIII, KKKK, and TTTT. In accordance with 40 CFR §60.4; copies of all requests, reports, applications, submittals and other communications regarding affected sources shall be forwarded to the Department at the address listed below unless otherwise noted.

**SECTION C. Site Level Plan Approval Requirements**

PADEP
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 U.S. 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
1650 Arch Street
Philadelphia, PA 19103-2029

Region III e-mail box for electronic compliance certifications: R3_APD_Permits@epa.gov

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

PADEP
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 U.S. 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
1650 Arch Street
Philadelphia, PA 19103-2029

Region III e-mail box for electronic compliance certifications: R3_APD_Permits@epa.gov

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

All air contamination sources and air cleaning devices authorized under this Plan Approval shall be operated and maintained in accordance with the specifications and maintenance schedule recommended by the manufacturer or developed by the Owner/Operator in accordance with industry standards. Developed maintenance plans shall be in place and available within 180 days of startup of each air contamination source or air cleaning device.

VII. ADDITIONAL REQUIREMENTS.**# 021 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Upon determination by the Owner/Operator that the source(s) covered by this Plan Approval are constructed and in compliance with all operative conditions of the Plan Approval, the Owner/Operator shall contact the Department and



SECTION C. Site Level Plan Approval Requirements

schedule the Initial Operating Permit Inspection.

022 [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 source(s) covered by this Plan Approval were constructed in accordance with the Plan Approval and the conditions of the Plan Approval, the Owner/Operator shall submit a Title V Operating Permit application for this Facility within 120 days.

023 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Requests to extend the period of temporary operation shall be submitted in writing to the Department at least 15 days prior to the expiration date of any authorized period of temporary operation.

024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall comply with the applicable requirements of 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 the construction and temporary operation of a natural gas-fired combined cycle power plant to be located in Robinson Township, Washington County.

026 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Air contamination sources and air cleaning devices authorized to be installed at the Facility under this Plan Approval are as follows:

- Two (2) Siemens, SGT6-8000H (or equivalent), natural gas-fired combustion turbines, 3,051 MMBtu/hr heat input rating (LHV) each; controlled by SCR and oxidation catalysts; 1,000 MW total net generating capacity.
- One (1) natural gas-fired auxiliary boiler, 30 MMBtu/hr heat input rating
- One (1) Cummins, QSX15 (or equivalent), diesel-fired fire pump engine, 411 bhp rating; including one (1) diesel fuel storage tank, 100 gallon maximum capacity.
- Miscellaneous components in natural gas service, and circuit breakers; controlled by leak detection and repair (LDAR).

027 [25 Pa. Code §127.206]

ERC general requirements.

The Owner/Operator shall secure 219 tons of NOx ERCs. ERCs shall be properly generated, certified by the Department and processed through the registry in accordance with 25 Pa. Code §127.206(d)(1). Upon transfer, the Owner/Operator shall provide the Department with documentation clearly specifying the details of the ERC transaction. This facility may not commence operation until the required emissions reductions are certified and registered by the Department.

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.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 033

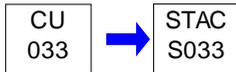
Source Name: NATURAL GAS-FIRED AUXILIARY BOILER (30 MMBTU/HR)

Source Capacity/Throughput:

30.000 MMBTU/HR

29.400 MCF/HR

Natural Gas

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Emissions from the natural gas-fired auxiliary boiler shall not exceed the following:

- a. NO_x – 0.020 lbs/MMBtu.
- b. CO – 0.055 lbs/MMBtu.

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Visible emissions from the natural gas-fired auxiliary boiler shall not exceed 10% opacity at any time.

Operation Hours Restriction(s).**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Operation of the auxiliary boiler shall not exceed 80 hours in any consecutive 12-month period.

II. TESTING REQUIREMENTS.**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall perform NO_x and CO portable analyzer testing upon the natural gas-fired auxiliary boiler according to the requirements of 25 Pa. Code Chapter 139 and EPA conditional test methods of ASTM D6522-00. Portable analyzer testing is required within 180 days of startup of the auxiliary boiler or on an alternative schedule as approved by the Department. Extension to the portable analyzer testing deadline may be granted by the Department in writing in response to a written request from the Owner/Operator and upon a satisfactory showing that an extension is justified.

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.**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall maintain the following comprehensive and accurate records [25 Pa. Code §127.12b]:

- a. Hours of operation of the auxiliary boiler on a 12-month rolling sum basis.
- b. Fuel type and consumption (expressed in MMscf) of the auxiliary boiler on a 12-month rolling sum basis.
- c. Emission test reports, all operating data collected during tests, and a copy of the calculations performed to determine compliance with emission limitations for the auxiliary boiler.

**SECTION D. Source Level Plan Approval Requirements**

**# 006 [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.

**# 007 [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.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Applicability and delegation of authority.**

The natural gas-fired auxiliary boiler is subject to the requirements of 40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Definitions.**

All terms used in 40 CFR Part 60 Subpart Dc shall have the meaning given in 40 CFR §60.41c or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

SECTION D. Source Level Plan Approval Requirements

Source ID: 201

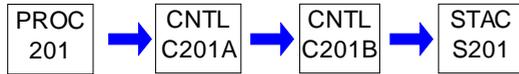
Source Name: COMBUSTION TURBINE UNIT #1

Source Capacity/Throughput: 3,051.000 MMBTU/HR

3.360 MMCF/HR

Natural Gas

Conditions for this source occur in the following groups: CEMS
 COMBUSTION TURBINES
 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).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 202

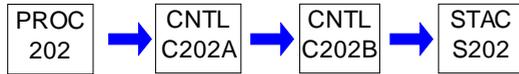
Source Name: COMBUSTION TURBINE UNIT #2

Source Capacity/Throughput: 3,051.000 MMBTU/HR

3.360 MMCF/HR

Natural Gas

Conditions for this source occur in the following groups: CEMS
 COMBUSTION TURBINES
 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).

**SECTION D. Source Level Plan Approval Requirements**

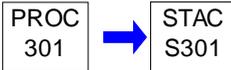
Source ID: 301

Source Name: DIESEL-FIRED FIRE PUMP ENGINE (411 BHP)

Source Capacity/Throughput:

21.400 Gal/HR

Diesel Fuel

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Visible emissions from the diesel-fired fire pump engine shall not:

- a. Equal or exceed 10% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
- b. Equal or exceed 30% opacity at any time.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart IIII - 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 co**

The diesel-fired fire pump engine shall be certified to meet the following Emission Standards for Stationary Fire Pump Engines in Table 4 to Subpart IIII of Part 60:

- a) 3.0 g/bhp-hr of NMHC + NOx
- b) 2.6 g/bhp-hr of CO
- c) 0.15 g/bhp-hr of PM

Fuel Restriction(s).**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Beginning June 1, 2010. Except as otherwise specifically provided in [40 CFR Part 80 Subpart I], all NR and [N/A] diesel fuel is subject to the following per-gallon standards [40 CFR §80.510(b)]:

- 1) Sulfur content:
 - i. 15 ppm maximum for NR diesel fuel.
 - ii. N/A
- 2) Cetane index or aromatic content, as follows:
 - i. A minimum cetane index of 40; or
 - ii. A maximum aromatic content of 35 volume percent.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]**Subpart IIII - 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 t**

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 purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

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).

**SECTION D. Source Level Plan Approval Requirements****III. MONITORING REQUIREMENTS.**

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart III - 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?**
The Owner/Operator shall install a non-resettable hour meter as specified in 40 CFR §60.4209(a).

IV. RECORDKEEPING REQUIREMENTS.

**# 006 [25 Pa. Code §127.12b]
Plan approval terms and conditions.**
The Owner/Operator shall maintain the following comprehensive and accurate records:

- Hours of operation of each the fire pump engine on a 12-month rolling sum basis.
- Hours of operation of the fire pump engine for maintenance and testing, emergency demand response, and non-emergency use.
- Fuel type and consumption (expressed in gallons) of the fire pump engine on a 12-month rolling sum basis.
- Fuel certification reports for each delivery of fuel demonstrating that total sulfur content does not exceed 15 ppm, and that either cetane index is a minimum of 40 or aromatic content does not exceed 35 % by volume.

**# 007 [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?**
The Owner/Operator shall comply with the applicable recordkeeping requirements specified in 40 CFR §60.4214(b).

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.

**# 008 [25 Pa. Code §127.12b]
Plan approval terms and conditions.**
The diesel-fired fire pump engine may only be tested when the combustion turbines are not in operation.

**# 009 [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?**
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.

**# 010 [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?**
The Owner/Operator shall meet the applicable compliance requirements specified in 40 CFR §60.4211(a), (c), and (f).

VII. ADDITIONAL REQUIREMENTS.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Am I subject to this subpart?**
The diesel-fired fire pump engine is subject to the requirements of 40 CFR Part 60 Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

**SECTION D. Source Level Plan Approval Requirements**

**# 012 [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?**

The Owner/Operator shall comply with the applicable General Provisions in §§60.1 through 60.19 listed in Table 8 to 40 CFR Part 60 Subpart IIII as specified in 40 CFR §60.4218.

**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4219]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What definitions apply to this subpart?**

All terms used in 40 CFR Part 60 Subpart IIII shall have the meaning given in 40 CFR §60.4219 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

**# 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Am I subject to this subpart?**

The diesel-fired fire pump engine is an "affected source" and subject to the requirements of 40 CFR Part 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

**# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
What parts of my plant does this subpart cover?**

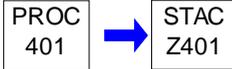
The diesel-fired fire pump engine is a new stationary RICE located at an area source. This engine must meet the requirements of 40 CFR Part 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII. No further requirements apply for this engine under 40 CFR Part 63 Subpart ZZZZ.

SECTION D. Source Level Plan Approval Requirements

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.

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.**# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall implement a methane (CH₄) LDAR program to minimize CH₄ leaks from fuel gas components as follows:

- LDAR shall be implemented on piping components in natural gas service within 30 days of startup of each air contamination source the piping services.
- Leaks shall be detected using audible, visual, and olfactory (AVO) inspections.
- Inspections shall be performed monthly.
- Repair or replacement of a leaking component shall be performed as expeditiously as practicable, but no later than fifteen (15) calendar days after the leak is detected. If the repair or replacement is technically infeasible, would require a combustion turbine shutdown, or would be unsafe to repair during operation of the unit; the repair or replacement must be completed during the next combustion turbine shutdown or within 2 years, whichever is earlier.
- 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.

VII. ADDITIONAL REQUIREMENTS.

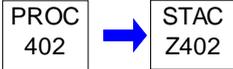
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

SECTION D. Source Level Plan Approval 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.

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.**# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall maintain the following comprehensive and accurate records:

- a. Amount of sulfur hexafluoride (SF6) dielectric added to each circuit breaker unit on a monthly basis.
- b. Date and time that each alarm associated with a 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.

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.**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall implement a sulfur hexafluoride (SF6) leak detection and repair (LDAR) program to minimize circuit breaker SF6 leaks as follows:

- a. Circuit breakers are to be state-of-the-art sealed enclosed-pressure circuit breakers with leak detection equipment that:
 - (1) Alerts the operator when 10 wt% of the SF6 has escaped from any breaker.
 - (2) Alerts the operator when a leak exceeds 5,000 ppm SF6.
- b. When alarms are triggered, the operator shall take corrective action as soon as practicable to repair the circuit breaker units to a like-new state to minimize emissions of SF6 to the maximum extent possible.
- c. Leaks shall be repaired no later than fifteen (15) calendar days after the leak is detected.



SECTION D. Source Level Plan Approval Requirements

VII. ADDITIONAL REQUIREMENTS.

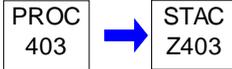
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 403

Source Name: FACILITY ROADWAYS

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.

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.**# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

In-plant roadways shall be paved and maintained so as to prevent fugitive emissions.

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: CEMS

Group Description: Combined Cycle Combustion Turbines CEMS

Sources included in this group

| ID | Name |
|-----|----------------------------|
| 201 | COMBUSTION TURBINE UNIT #1 |
| 202 | COMBUSTION TURBINE UNIT #2 |

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 each 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 each 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. The owner or operator of the source shall not be issued an operating permit until the CEMS has received Phase III approval, in writing from the Department, when installation of a CEMS is made a condition of the plan approval. Until Phase III Department approval is obtained, operation shall be covered solely under condition of a plan approval.

f. 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 CEMS must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code §123.51; 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

**SECTION E. Source Group Plan Approval Restrictions.**

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: NOx
- (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; 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

- (A) Emission Standard Averaging Period Description: 1-hour average, block
- (B) Emission Standard Value: 2.0 ppmvd (normal)
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

ii. Emission Standard #2

- (A) Emission Standard Averaging Period Description: 30 operating day operating hour average.
- (B) Emission Standard Value: 15.0 ppmvd (normal, startup, shutdown, and malfunction)
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

b. CEMS #2

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: NOx
- (3) Units of measurement to be reported: 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 #1

- (A) Emission Standard Averaging Period Description: 1-hour average
- (B) Emission Standard Value: 25.40 lb/hr (normal)
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

c. CEMS #3

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: CO
- (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 #1

- (A) Emission Standard Averaging Period Description: 1-hour average, block
- (B) Emission Standard Value: 2.0 ppmvd (normal)
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

**SECTION E. Source Group Plan Approval Restrictions.**

d. CEMS #4

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: CO
- (3) Units of measurement to be reported: 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 #1

- (A) Emission Standard Averaging Period Description: 1-hour average
- (B) Emission Standard Value: 15.50 lb/hr (normal)
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

e. CEMS #5

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: CO₂
- (3) Units of measurement to be reported: %
- (4) Moisture basis of measurement to be reported: Dry
- (5) Correction basis of measurements to be reported: N/A
- (6) Data substitution required: 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

- (A) Emission Standard Averaging Period Description: 1-hour average, block
- (B) Emission Standard Value: N/A
- (C) Emission Standard Direction: N/A
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

f. CEMS #6

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (2) Parameter to be reported: CO₂
- (3) Units of measurement to be reported: lb/MWh
- (4) Moisture basis of measurement to be reported: Dry
- (5) Correction basis of measurements to be reported: N/A
- (6) Data substitution required: 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

- (A) Emission Standard Averaging Period Description: 12-month average
- (B) Emission Standard Value: 813 lb/MWh
- (C) Emission Standard Direction: Violation if greater than emission standard value.
- (D) Variable Emission Standard: N/A
- (E) Emission Standard and/or Status: N/A

g. CEMS #7

- (1) Source combination to be monitored: Source ID 201 and Source ID 202 (Combustion Turbines)
- (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.

**SECTION E. Source Group Plan Approval Restrictions.**

(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 #1

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

(B) Emission Standard Value: 5.0 ppmvd (normal)

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

(D) Variable Emission Standard: N/A

(E) 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 Owner/Operator 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 (Additional authority for this condition is derived from 40 CFR Part 60 Subparts A and KKKK, 40 CFR Part 75 Subpart F, and 25 Pa. Code §§139.101(5) and 139.101(12)).

* 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 Owner/Operator 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 (Additional authority for this condition is derived from 40 CFR Part 60 Subparts A and KKKK, 40 CFR Part 75 Subpart F, and 25 Pa. Code §§139.101(1) and 139.101(10)).

a. The Owner/Operator 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).

**SECTION E. Source Group Plan Approval Restrictions.****VII. ADDITIONAL REQUIREMENTS.****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

CEMS data availability standards

CEMS #1, CEMS #2, CEMS #3, CEMS #4, CEMS #5, CEMS #6, and CEMS #7

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 at least 2 valid hourly averages in order to be considered valid. 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 30-day average and 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.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: COMBUSTION TURBINES
 Group Description: Combined Cycle Combustion Turbines
 Sources included in this group

| ID | Name |
|-----|----------------------------|
| 201 | COMBUSTION TURBINE UNIT #1 |
| 202 | COMBUSTION TURBINE UNIT #2 |

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Visible emissions from each combined cycle combustion turbine shall not exceed 10% opacity at any time.

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

During normal operation, emissions from each combined cycle combustion turbine shall not exceed the following:

NO_x – 2.0 ppmvd @ 15% O₂
 NO_x – 25.40 lb/hr

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

CO – 2.0 ppmvd @ 15% O₂ on a 1-hour average.
 CO – 15.50 lb/hr

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

VOC – 1.0 ppmvd @ 15% O₂ without duct firing
 VOC – 1.3 ppmvd @ 15% O₂ with duct firing

Compliance Method/Averaging Period:
 Initial: U.S. EPA Reference Method 18 and 25A.
 Continuous: 3-hour block based on initial test and VOC to CO correlation.

PM – 0.0054 lb/MMBtu
 PM – 18.20 lb/hr

Compliance Method/Averaging Period:
 U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

PM₁₀ – 0.0054 lb/MMBtu
 PM₁₀ – 18.20 lb/hr

Compliance Method/Averaging Period:
 U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

PM_{2.5} – 0.0054 lb/MMBtu
 PM_{2.5} – 18.20 lb/hr

SECTION E. Source Group Plan Approval Restrictions.

Compliance Method/Averaging Period:
U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

SO₂ – 0.00062 lb/MMBtu

Compliance Method/Averaging Period:
U.S. EPA Reference Method 6C.

H₂SO₄ – 0.00034 lb/MMBtu

Compliance Method/Averaging Period:
U.S. EPA Reference Method 8.

HCHO - 91 ppbv @ 15% O₂

Compliance Method/Averaging Period:
Initial: U.S. EPA Reference Method 320, or ASTM D6348-03 provided that %R as determined in Annex A5 of ASTM D6348-03 is equal or greater than 70% and less than or equal to 130%.
Continuous: 3-hour block based on initial test and HCHO to CO correlation.

NH₃ - 5.0 ppmv @ 15% O₂ on a 3-hour average.

Compliance Method/Averaging Period:
Initial: U.S. EPA Conditional Test Method CTM-027.
Continuous: 3-hour block.

CO₂ – 813 lb/MWh (gross energy output) on a monthly 12-month rolling average.

Compliance Method/Averaging Period:
Initial: U.S. EPA Reference Method 3A.
Continuous: 12-month rolling.

*Alternative compliance methods may be approved in writing by the Department.

003 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Total emissions from both combined cycle combustion turbines, including periods of startup and shutdown, shall not exceed the following on a 12-month rolling sum basis:

NO_x – 190.26 tons

CO – 142.02 tons

VOC – 45.40 tons

PM – 112.82 tons

PM₁₀ – 112.82 tons

PM_{2.5} – 112.82 tons

**SECTION E. Source Group Plan Approval Restrictions.**

SO₂ – 15.42 tons
 H₂SO₄ – 7.67 tons
 HCHO – 4.40 tons
 NH₃ – 170.13 tons
 CO_{2e} – 2,930,740 tons

Throughput Restriction(s).**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Heat input to both combined cycle combustion turbines, excluding during periods of startup and shutdown, shall not exceed 41,670,370 MMBtu on a 12-month rolling sum basis. This limit may be increased based on actual stack test results with written approval from the Department.

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall perform NO_x, CO, VOC (with and without duct firing), PM, PM₁₀, PM_{2.5}, HCHO, hexane, and NH₃ emission testing upon each of the two combustion turbines according to the requirements of 25 Pa. Code Chapter 139. Initial performance testing is required within 180 days of startup of the turbines or on an alternative schedule as approved by the Department. Subsequent performance testing is required at minimum of once every 5 years thereafter. Extension to the initial and subsequent performance testing deadlines may be granted by the Department in writing in response to a written request from the Owner/Operator and upon a satisfactory showing that an extension is justified. EPA Reference Method performance testing shall be conducted for the initial and subsequent performance tests.

III. MONITORING REQUIREMENTS.**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Owner/Operator shall continuously monitor and record pressure differential across, ammonia injection rate prior to, and inlet and outlet temperature to the catalyst bed for each SCR control device.

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

The Owner/Operator shall continuously monitor and record pressure differential across and inlet and outlet temperature to the catalyst bed for each oxidation catalyst control device.

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

The Owner/Operator shall maintain the following comprehensive and accurate records:

- a. Hours of operation of each combustion turbine on a 12-month rolling sum basis.
- b. Hours of operation of each combustion turbine operating in startup or shutdown on a 12-month rolling sum basis including the date, time, type (cold, warm, hot), and duration of each event.
- c. Fuel type and consumption (expressed in MMscf) of each combustion turbine on a 12-month rolling sum basis.
- d. Heat input (expressed in MMBtu) to both combustion turbines combined, excluding during startup and shutdown, on a 12-month rolling sum basis.
- e. Pressure differential across, and inlet and outlet temperature to each oxidation catalyst control device.
- f. Inlet temperature to each oxidation catalyst control device on an hourly 4-hour rolling average.
- g. Pressure differential across, ammonia injection rate prior to, and inlet and outlet temperature to each SCR control device.
- h. Emission test reports, all operating data collected during tests, and a copy of the calculations performed to determine compliance with emission limitations for the combustion turbines.
- i. Monitoring information and report data as specified in 25 Pa. Code Chapter 139 Subchapter C and the most recent

**SECTION E. Source Group Plan Approval Restrictions.**

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

The Owner/Operator shall maintain the 4-hour rolling average of each oxidation catalyst's inlet temperature within its design operating temperature range.

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

The Owner/Operator may only operate a combined cycle combustion turbine in a defined operating mode. Operating modes of the combined cycle combustion turbines are defined as follows:

Startup – Beginning upon combustion of fuel within the combustion chamber and ending when the SCR catalyst bed reaches its design operating temperature.

Shutdown – Beginning when the SCR catalyst bed drops below its design operating temperature and ending when fuel is no longer being combusted.

Normal – Any time fuel is being combusted other than startup or shutdown.

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

Startups and shutdowns from each combined cycle combustion turbine shall be limited as follows:

- a. Cold start is defined as a restart occurring 72 or more hours after a shutdown.
- b. Warm start is defined as a restart occurring between 8 hours and 72 hours after a shutdown.
- c. Hot start is defined as a restart occurring less than 8 hours after a shutdown.
- d. Duration of each startup and shutdown shall be minimized to the extent possible consistent with manufacturer's procedures.
- e. Duration of all startups and shutdowns combined shall not exceed 33.8 hours in any consecutive 12-month period.

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

The Owner/Operator shall comply with the applicable requirements of 40 CFR Part 97 Subpart AAAAA – TR NOx Annual Trading Program for each of the two combustion turbines with heat recovery steam generators.

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

The Owner/Operator shall comply with the applicable requirements of 40 CFR Part 97 Subpart CCCCC – TR SO2 Group 1 Trading Program for each of the two combustion turbines with heat recovery steam generators.

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

The Owner/Operator shall comply with the applicable requirements of 40 CFR Part 97 Subpart BBBB – TR NOx Ozone Season Trading Program for each of the two combustion turbines with heat recovery steam generators.

015 [40 CFR Part 72 Regulations on Permits §40 CFR 72.6]**Subpart A--Acid Rain Program General Provisions
Applicability.**

The two combustion turbines with heat recovery steam generators are classified as Utility units and subject to the

**SECTION E. Source Group Plan Approval Restrictions.**

requirements of the Acid Rain Program as specified in 40 CFR §72.6(a).

016 [40 CFR Part 72 Regulations on Permits §40 CFR 72.9]**Subpart A--Acid Rain Program General Provisions****Standard requirements.**

The Owner/Operator shall comply with the applicable permit requirements, including the requirement to submit a complete Acid Rain permit application (at least 24 months before the date on which the unit commences operation), as specified in 40 CFR §72.9(a).

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: NSPS SUBPART KKKK

Group Description: Combined Cycle Combustion Turbines Subpart KKKK

Sources included in this group

| ID | Name |
|-----|----------------------------|
| 201 | COMBUSTION TURBINE UNIT #1 |
| 202 | COMBUSTION TURBINE UNIT #2 |

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for nitrogen oxides (NOX)?**

The Owner/Operator shall comply with the applicable NOx limits specified in 40 CFR §60.4320. [Compliance with the LAER NOx limit of 2 ppmvd @ 15% O2 will show compliance with this requirement.]

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)?**

The Owner/Operator shall comply with the applicable SO2 limits specified in 40 CFR §60.4330. [Compliance with the natural gas fuel sulfur limit of 0.2 grains/100 dscf will show compliance with this requirement.]

II. TESTING REQUIREMENTS.**# 003 [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?**

The Owner/Operator shall comply with the applicable fuel sulfur content determination requirements specified in 40 CFR §60.4360.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4400]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I conduct the initial and subsequent performance tests, regarding NOX ?**

The Owner/Operator shall comply with the applicable NOx performance testing requirements specified in 40 CFR §60.4400.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4405]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I perform the initial performance test if I have chosen to install a NOX-diluent CEMS?**

The Owner/Operator shall comply with the applicable initial NOx performance test specified in 40 CFR §60.4405.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4415]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I conduct the initial and subsequent performance tests for sulfur?**

The Owner/Operator shall comply with the applicable sulfur performance testing requirements specified in 40 CFR §60.4415.

III. MONITORING REQUIREMENTS.**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4340]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I demonstrate continuous compliance for NOX if I do not use water or steam injection?**

The Owner/Operator shall comply with the applicable NOx continuous compliance demonstration requirements specified in 40 CFR §60.4340.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4345]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?**

The Owner/Operator shall comply with the applicable NOx CEMS requirements specified in 40 CFR §60.4345.

**SECTION E. Source Group Plan Approval Restrictions.**

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

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

The Owner/Operator shall comply with the applicable continuous monitoring data excess emissions requirements specified in 40 CFR §60.4350.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

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

The Owner/Operator shall comply with the applicable fuel sulfur monitoring exemption requirements specified in 40 CFR §60.4365.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4380]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

How are excess emissions and monitor downtime defined for NOX ?

The Owner/Operator shall comply with the applicable NOx excess emissions and monitor downtime requirements specified in 40 CFR §60.4380.

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.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What reports must I submit?

The Owner/Operator shall comply with the applicable reporting requirements specified in 40 CFR §60.4375.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4395]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

When must I submit my reports?

The Owner/Operator shall comply with the applicable reporting deadlines specified in 40 CFR §60.4395.

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.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

Does this subpart apply to my stationary combustion turbine?

The two combustion turbines with heat recovery steam generators are subject to the requirements of 40 CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines.

015 [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?

The Owner/Operator shall comply with the applicable general requirements specified in 40 CFR §60.4333.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4420]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What definitions apply to this subpart?

All terms used in 40 CFR Part 60 Subpart KKKK shall have the meaning given in 40 CFR §60.4420 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: NSPS SUBPART TTTT

Group Description: Combined Cycle Combustion Turbines Subpart TTTT

Sources included in this group

| ID | Name |
|-----|----------------------------|
| 201 | COMBUSTION TURBINE UNIT #1 |
| 202 | COMBUSTION TURBINE UNIT #2 |

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?**

The Owner/Operator shall comply with the applicable CO2 gross energy output standard in Table 2 to 40 CFR Part 60 Subpart TTTT [Compliance with the BACT CO2 limit of 813 lb CO2/MWh will demonstrate compliance with this requirement].

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?**

The Owner/Operator shall comply with the applicable monitoring and data collection requirements specified in 40 CFR §60.5535.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5540]**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
How do I demonstrate compliance with my CO2 emissions standard and determine excess emissions?**

The Owner/Operator shall comply with the applicable compliance demonstration and excess emission determination requirements specified in 40 CFR §60.5540.

IV. RECORDKEEPING REQUIREMENTS.**# 004 [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?**

The Owner/Operator shall comply with the applicable recordkeeping requirements specified in 40 CFR §60.5560.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5565]**Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
In what form and how long must I keep my records?**

The Owner/Operator shall comply with the applicable record form and retention requirements specified in 40 CFR §60.5565.

V. REPORTING REQUIREMENTS.**# 006 [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?**

The Owner/Operator shall comply with the applicable notification requirements specified in 40 CFR §60.5550.

007 [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?**

The Owner/Operator shall comply with the applicable reporting requirements specified in 40 CFR §60.5555.

**SECTION E. Source Group Plan Approval 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).

VII. ADDITIONAL REQUIREMENTS.

**# 008 [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?**

The two combustion turbines with heat recovery steam generators are "affected EGUs" and subject to requirements of 40 CFR Part 60 Subpart TTTT – Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units.

**# 009 [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?**

The Owner/Operator shall comply with greenhouse gas regulations, and PSD and title V thresholds for greenhouse gases as applicable under 40 CFR §60.5515.

**# 010 [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?**

The Owner/Operator shall comply with the applicable general requirements specified in 40 CFR §60.5525.

**# 011 [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?**

The Owner/Operator shall comply with the applicable general provisions of 40 CFR Part 60 Subpart A specified in Table 3 to 40 CFR Part 60 Subpart TTTT

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5580]
Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
What definitions apply to this subpart?**

All terms used in 40 CFR Part 60 Subpart TTTT shall have the meaning given in 40 CFR §60.5580 or else in the Clean Air Act and 40 CFR Part 60 Subpart A



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

This is a major Title V facility for NO_x, CO, PM₁₀, PM_{2.5}, 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)

This is a natural minor facility with respect to VOC, 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:

50.0 tons of VOC (VOLATILE ORGANIC COMPOUNDS)

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 POLLUTANTS)



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