



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

**PLAN APPROVAL**

Issue Date:

Effective Date:

Expiration Date:

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. 18-00033B**

Federal Tax Id - Plant Code: 47-2181250-1

**Owner Information**

Name: RENOVO ENERGY CENTER LLC  
Mailing Address: 12011 SUNSET HILLS RD STE 110  
RESTON, VA 20190-5919

**Plant Information**

Plant: RENOVO ENERGY CENTER LLC/RENOVO PLT  
Location: 18 Clinton County 18802 Renovo Borough  
SIC Code: 4911 Trans. & Utilities - Electric Services

**Responsible Official**

Name: RICHARD FRANZESE  
Title: DIR OF DEVELOPMENT  
Phone: (571) 392 - 6389

**Plan Approval Contact Person**

Name: RICHARD FRANZESE  
Title: DIR OF DEVELOPMENT  
Phone: (571) 392 - 6389

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

*MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION*



[Plan Approval Description](#)

This plan approval is for the construction and operation of a 1,240 Megawatt natural gas/ultra-low sulfur diesel-fired combustion turbine power plant with ancillary equipment.



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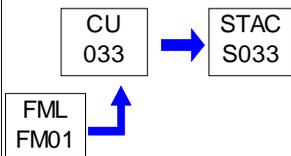
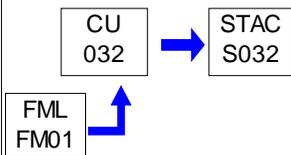
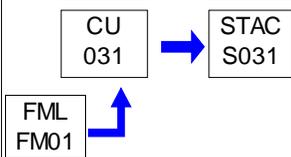
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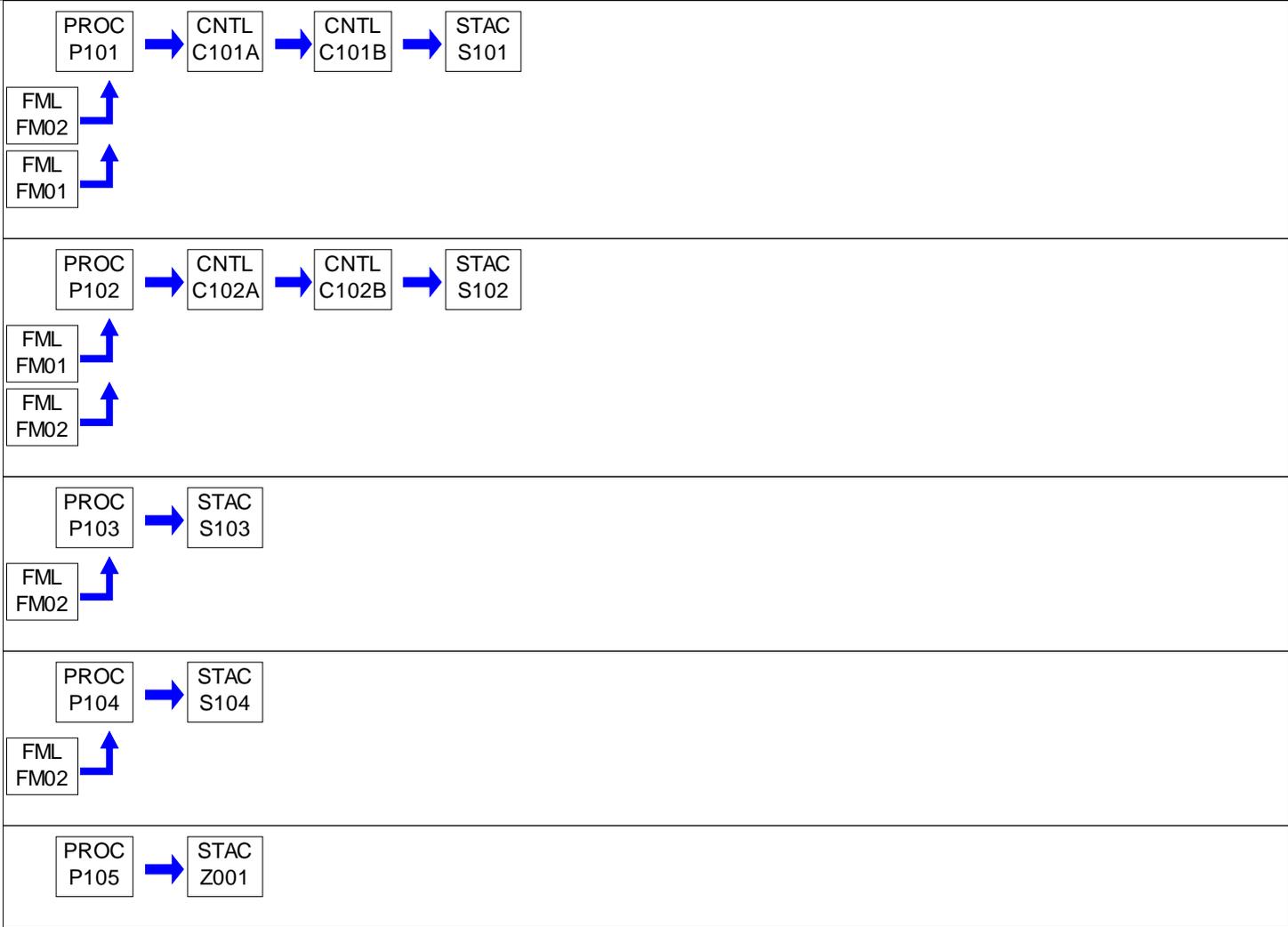
**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
031	AUXILIARY BOILERS		
032	WATER BATH HEATER		
033	DEW POINT HEATER		
P101	COMBUSTION TURBINE #1		
P102	COMBUSTION TURBINE #2		
P103	EMERGENCY GENERATOR ENGINE		
P104	FIRE PUMP ENGINE		
P105	STORAGE TANKS		
C101A	SELECTIVE CATALYTIC REDUCTION		
C101B	OXIDATION CATALYST		
C102A	SELECTIVE CATALYTIC REDUCTION		
C102B	OXIDATION CATALYST		
FM01	NATURAL GAS LINE		
FM02	ULTRA LOW SULFUR DIESEL FUEL TANK		
S031	AUXILIARY BOILER STACKS		
S032	WATER BATH HEATER STACK		
S033	DEW POINT HEATER STACK		
S101	COMBUSTION TURBINE #1 STACK		
S102	COMBUSTION TURBINE #2 STACK		
S103	EMERGENCY GENERATOR ENGINE STACK		
S104	FIRE PUMP ENGINE STACK		
Z001	FUGITIVE EMISSIONS		

**PERMIT MAPS**



**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 §123.1]****Prohibition of certain fugitive emissions**

The permittee shall not permit the emission of fugitive air contaminants into the outdoor atmosphere 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) Sources and classes of sources other than those identified above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (a) the emissions are of minor significance with respect to causing air pollution; and
  - (b) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

**# 002 [25 Pa. Code §123.2]****Fugitive particulate matter**

The permittee shall not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in (1) through (8) in condition #001 if the emissions are visible at the point the emissions pass outside the permittee's property.

**# 003 [25 Pa. Code §123.41]****Limitations**

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

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

**# 004 [25 Pa. Code §123.42]****Exceptions**

The emission limitations in condition #003 shall not apply when:

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions;
- (3) The emission results from sources specified in condition #001 (1) through (8).

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

Pursuant to the best available control technology requirements of the Prevention of Significant Deterioration provisions in

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

40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions of 25 Pa. Code Section 127.1 and 127.12, the combined total sulfur hexafluoride (SF6) emissions from all of the circuit breakers used at the facility shall not exceed 16 pounds in any 12 consecutive month period. Additionally, the greenhouse gas emissions, expressed as CO<sub>2</sub>e, from all of the circuit breakers used at the facility shall not exceed 183 tons in any 12 consecutive month period.

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

(a) Pursuant to 25 Pa. Code Section 139.3, at least 60 calendar days prior to commencing an EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) Pursuant to 25 Pa. Code Section 139.3, at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 40 CFR Section 60.8(a), 40 CFR Section 61.13(f) and 40 CFR Section 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method 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 noncompliance 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 Section 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) The permittee shall insure 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.

(h) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS\*Online available through <https://www.depgreenport.state.pa.us/ecomm/Login.jsp> when it becomes available. If internet submittal can not be accomplished, two (2) copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, North Central Regional Office, Air Quality Program Manager, 208 West Third Street, Suite 101, Williamsport PA, 17701 with deadlines verified through document postmarks.

(i) The permittee shall insure 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.

**SECTION C. Site Level Plan Approval Requirements****# 007 [25 Pa. Code §139.1]****Sampling facilities.**

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

**# 008 [25 Pa. Code §139.11]****General requirements.**

(1) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the respective source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, at a minimum all of the following:

- (a) A thorough source description, including a description of any air cleaning devices and the flue.
- (b) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
- (c) The location of the sampling ports.
- (d) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO<sub>2</sub>, O<sub>2</sub> and N<sub>2</sub>), static and barometric pressures.
- (e) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (f) Laboratory procedures and results.
- (g) Calculated results.

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

Pursuant to the best available control technology requirements of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions of 25 Pa. Code Section 127.1 and 127.12, the circuit breakers at the facility shall be state-of-the-art sealed enclosed-pressure circuit breakers equipped with low-pressure alarms and a low-pressure lockout where the alarms are triggered when 10% of the sulfur hexafluoride (SF<sub>6</sub>) (by weight) has escaped. When the alarms are triggered, the permittee shall take immediate corrective action and fix the circuit breaker units to a like new state in order to prevent the emission of sulfur hexafluoride (SF<sub>6</sub>) to the maximum extent practicable.

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

(a) The permittee shall conduct a daily inspection of the facility during daylight hours while the facility is operating to detect the presence of visible air contaminant emissions, visible fugitive air contaminant emissions and malodorous air contaminant emissions in excess of applicable emission limits.

(b) All visible air contaminant emissions, visible fugitive air contaminant emissions and malodorous air contaminant emissions observed to be in excess of an emission limit shall be reported to the manager of the facility at once.

**IV. RECORDKEEPING REQUIREMENTS.****# 011 [25 Pa. Code §135.5]****Recordkeeping**

(a) The permittee shall maintain and make available upon request of the Department such records, including computerized records that may be necessary to comply with 25 Pa. Code Section 135.3. These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

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

(b) All records generated pursuant to this condition shall be retained for a minimum of five years and be made available to the Department upon request.

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

The permittee shall submit all requested reports in accordance with the Department's suggested format.

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

(a) The permittee shall report malfunctions which occur at this facility to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner that may result in an increase in the emissions of air contaminants. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(b) Failures that are caused in part by poor maintenance or careless operation shall be reported as excess emissions or deviations from this permit's requirements.

(c) When the malfunction, excess emissions or deviation from this permit's requirements poses an imminent and substantial danger to the public health and safety or the environment, the permittee shall notify the Department by telephone no later than one (1) hour after the incident. The permittee shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report.

(d) Unless otherwise required by the specific reporting requirements, any malfunction, excess emissions or deviation from this permit's requirements that is not subject to the notice requirements of subsection (c) of this permit condition shall be reported to the Department within 24 hours of discovery. In notifying the Department, the permittee shall describe the following:

- (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;
- (v) estimated rate of emissions; and
- (vi) corrective actions or preventative measures taken.

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

(f) Upon the request of the Department, the permittee shall submit a full written report to the Regional Air Program Manager within fifteen (15) days of the malfunction, excess emissions or deviations from this permit's requirements.

**# 014 [25 Pa. Code §135.3]****Reporting**

(a) A person who owns or operates a source to which 25 Pa. Code Chapter 135 applies, and who has previously been advised by the Department to submit an annual Air Information Management Systems (AIMS) report, shall submit by March 1 of each year an AIMS report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that an annual AIMS report is necessary, shall submit an initial annual AIMS report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

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

**SECTION C. Site Level Plan Approval Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 015 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne as specified in 25 Pa. Code Section 123.1 subsection(s) (a)(1)-(7) or (a)(9). These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land,
- (2) Application of asphalt, oil, or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts,
- (3) Paving and maintenance of roadways,
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

**VII. ADDITIONAL REQUIREMENTS.****# 016 [25 Pa. Code §121.7]****Prohibition of air pollution.**

The permittee shall not permit air pollution as that term is defined in the Pennsylvania Air Pollution Control Act (35 P.S. Sections 4001-4015).

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

The Department will evaluate the actual emission rates and may revise the allowable emission limitations based upon demonstrated performance (CEMS data, stack tests results), and/or subsequently promulgated applicable requirements during the first five years of operation. Any revision of the allowable emission limitations shall be accomplished by permit modification provided that the revised allowable emission limitations do not exceed levels at which the lowest achievable emission rate (LAER), best available control technology (BACT) and best available technology (BAT) were evaluated, do not exceed the level at which the facility impacts were modeled, and that are not a result of a physical change at the facility or change in mode of operation.

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

ursuant to the New Source Review provisions in 25 Pa. Code Sections 127.201 through 127.217, the permittee shall purchase and apply 418.10 tons per year of nitrogen oxide (NO<sub>x</sub>) emission reduction credits (ERCs) and 120.20 tons per year of volatile organic compound (VOC) ERCs prior to commencing operation of any source at the facility to offset the total of the net increase in potential to emit. The permittee shall certify to the Northcentral Regional Office of the Department the amount of ERCs purchased, the company from which the ERCs were purchased, and the effective date of transfer of the ERCs. The purchase and application of the NO<sub>x</sub> and VOC ERCs shall be tracked in the Department's ERC registry system. Failure to purchase and apply the ERCs prior to commencing operation at the facility shall make this plan approval null and void.

**# 019 [25 Pa. Code §129.14]****Open burning operations**

The permittee shall not permit the open burning of material at this facility unless in accordance with 25 Pa. Code Section 129.14.

**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.**

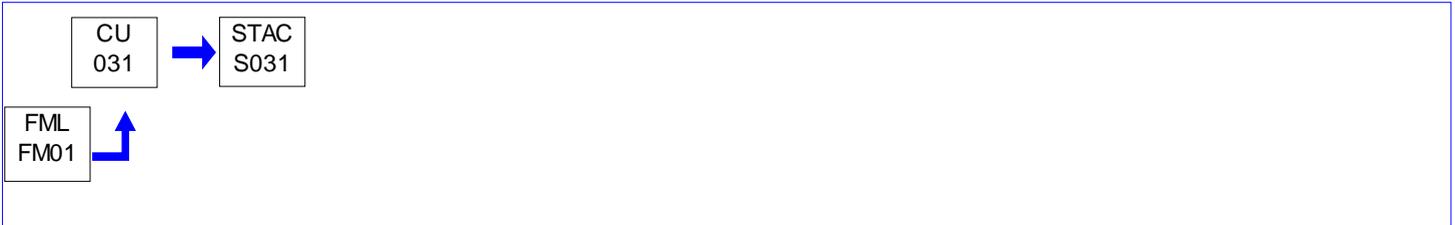
No compliance milestones exist.

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

Source ID: 031

Source Name: AUXILIARY BOILERS

Source Capacity/Throughput:

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

[Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.11]

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of each boiler incorporated in Source 031 shall not exceed the following limitations:

- (a) Nitrogen Oxides (NO<sub>x</sub>, expressed as NO<sub>2</sub>) – 0.006 lb/MMBtu and 0.44 tpy
- (b) Carbon Monoxide (CO) – 0.036 lb/MMBtu and 2.61 tpy
- (c) Volatile Organic Compound – 0.002 lb/MMBtu and 0.15 tpy
- (d) Particulate Matter less than 10 microns in diameter (PM<sub>10</sub>) – 0.0019 lb/MMBtu and 0.14 tpy

**Throughput Restriction(s).****# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

{Compliance with this condition will assure compliance with the provisions of 25 Pa. Code Section 123.22}

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each boiler incorporated in Source 031 shall only utilize natural gas as fuel and fire no more than 145,200 MMBtu of natural gas in any 12 consecutive month period.

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

The permittee shall conduct initial EPA reference method testing within 180 days of the startup of each boiler incorporated in Source 031 for nitrogen oxides and carbon monoxide to demonstrate compliance with the emission limitations.

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

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

(a) The permittee shall keep records of the amount of natural gas fired in each boiler incorporated in Source 031 on a daily basis.

(b) All records generated pursuant to this condition shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each boiler incorporated in Source 031 shall be operated in accordance with the manufacturer's specifications and good operating practices.

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

Source 031 consists of two (2) 66 million Btu per hour natural gas-fired combustion units.

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each boiler incorporated in Source 031 shall be equipped with ultra-low NOx burners and flue gas recirculation.

**# 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.**

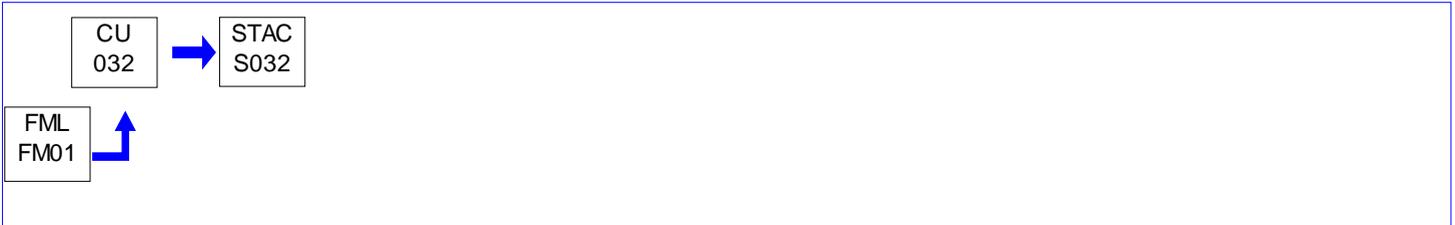
Each boiler incorporated in Source 031 is subject to the requirements of 40 CFR Part 60 Subpart Dc Sections 60.40c through 60.48c. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart Dc Sections 60.40c through 60.48c.

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

Source ID: 032

Source Name: WATER BATH HEATER

Source Capacity/Throughput:

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

[Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.11]

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of each heater incorporated in Source 032 shall not exceed the following limitations:

- (a) nitrogen oxides – 0.011 lb/MMBtu and 0.72 tpy
- (b) carbon monoxide – 0.037 lb/MMBtu and 2.43 tpy
- (c) volatile organic compound – 0.005 lb/MMBtu and 0.33 tpy
- (d) particulate matter less than 10 microns in diameter (PM10) – 0.0019 lb/MMBtu and 0.12 tpy

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

{Compliance with this condition will assure compliance with the provisions of 25 Pa. Code Section 123.22}

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each heater incorporated in Source 032 shall only utilize natural gas as fuel.

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the permittee shall only operate two water heaters incorporated in Source 032 at a time. The third water heater will be in back up mode.

**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.**

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each heater incorporated in Source 032 shall be operated in accordance with the manufacturer's specifications and good operating practices.

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

Source 032 consists of three (3) 15 million Btu per hour water bath heaters.

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

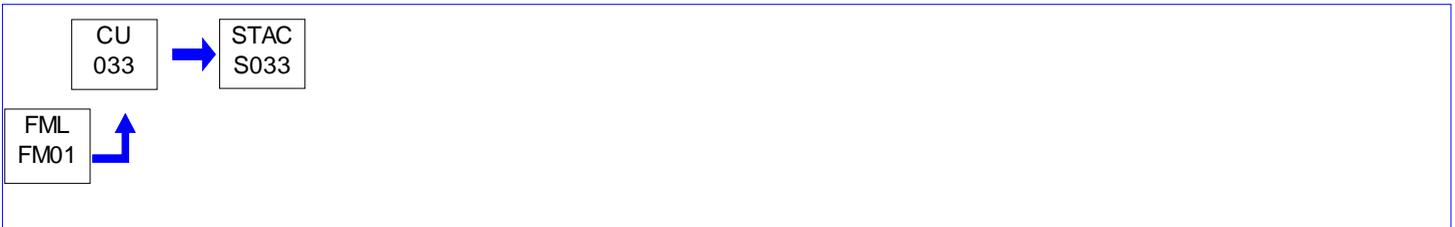
Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, each heater incorporated in Source 032 shall be equipped with a low NOx burner.

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

Source ID: 033

Source Name: DEW POINT HEATER

Source Capacity/Throughput:

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

[Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.11]

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of Source 033 shall not exceed the following limitations:

- (a) nitrogen oxides – 0.033 lb/MMBtu and 0.43 tpy
- (b) carbon monoxide – 0.082 lb/MMBtu and 1.08 tpy
- (c) volatile organic compound – 0.005 lb/MMBtu and 0.07 tpy
- (d) particulate matter less than 10 microns in diameter – 0.0018 lb/MMBtu and 0.02 tpy

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source 033 shall only utilize natural gas as 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).

**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).

**SECTION D. Source Level Plan Approval 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.****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source 033 shall be operated in accordance with the manufacturer's specifications and good operating practices.

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

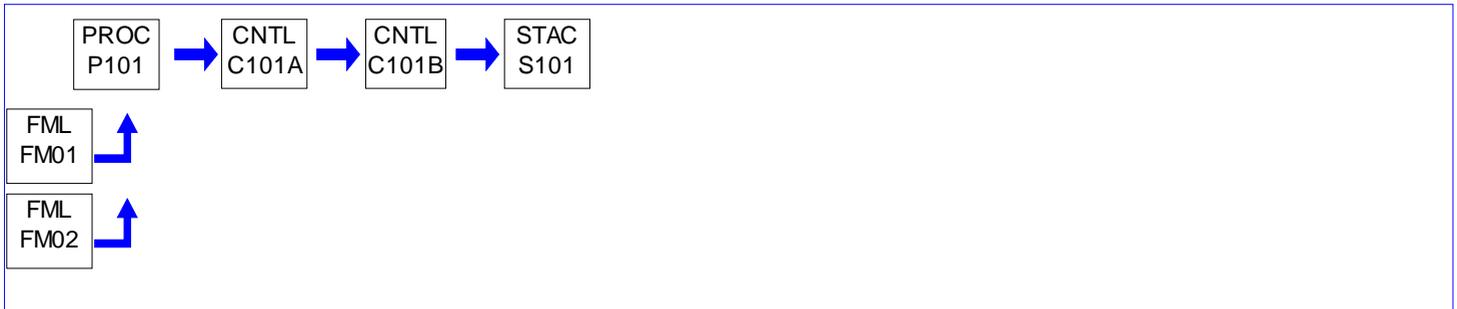
Source 033 is a 3 million Btu per hour natural gas-fired dew point heater.

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

Source ID: P101

Source Name: COMBUSTION TURBINE #1

Source Capacity/Throughput:

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

[Compliance with the particulate matter and sulfur oxide limitations in this condition will assure compliance with the provisions of 25 Pa. Code Sections 123.13 and 123.21, respectively]

(a) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while firing natural gas:

- (1) nitrogen oxides – 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 33.30 lb/hr
- (2) volatile organic compounds - 0.7 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 3.10 lb/hr for the combustion turbine (CT) only and 1.6 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 9.30 lb/hr for both the CT and duct burners (DB)

(b) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while firing natural gas:

- (1) carbon monoxide - 0.9 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 7.00 lb/hr for the CT only and 1.5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 15.20 lb/hr for both the CT and DB
- (2) total (filterable and condensable) particulate matter having an aerodynamic diameter of 10 micron and 2.5 micron - 0.005 lb/MMBtu and 22.50 lb/hr

(c) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while firing natural gas:

- (1) sulfur dioxide - 0.0012 lb/MMBtu and 5.43 lb/hr
- (2) formaldehyde – 0.58 lb/hr
- (3) sulfuric acid - 0.0009 lb/MMBtu and 4.07 lb/hr
- (4) ammonia slip - 5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 32.34 lb/hr

(d) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while ULSD:

- (1) nitrogen oxides – 4.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 59.60 lb/hr

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

(2) volatile organic compounds - 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 10.40 lb/hr

(e) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while ULSD:

(1) carbon monoxide - 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 18.10 lb/hr

(2) total (filterable and condensable) particulate matter including particulate matter with an aerodynamic diameter of 10 micron and 2.5 micron - 0.0122 lb/MMBtu and 48.20 lb/hr.

(f) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while ULSD

(1) sulfur dioxide - 0.0018 lb/MMBtu and 7.09 lb/hr

(2) sulfuric acid - 0.0012 lb/MMBtu and 4.62 lb/hr

(3) ammonia slip - 5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 28.98 lb/hr

(g) The nitrogen oxides, carbon monoxide and ammonia emissions limits shall be established as a one-hour period.

(h) Unless otherwise specified herein, the above emissions limits shall apply at all times except for periods of startup and shutdown.

(i) The applicable sulfur dioxide requirements in 40 CFR Section 60.4330 are streamlined into this permit condition.

(j) The carbon dioxide equivalent (CO<sub>2</sub>e) emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed 894 pounds per Megawatt of electricity produced from Source P101.

**# 002 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

(a) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below:

(1) nitrogen oxides – 177.58 tons in any 12 consecutive month period

(2) volatile organic compounds - 51.22 tons in any 12 consecutive month period

(b) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below:

(1) carbon monoxide - 162.93 tons in any 12 consecutive month period

(2) total (filterable and condensable) particulate matter - 105.96 tons in any 12 consecutive month period

(3) greenhouse gases - 2,709,297 tons in any 12 consecutive month period

(c) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C101A and C101B associated with Source P101 shall not exceed the limits specified below while firing natural gas:

(1) sulfur dioxide - 26.74 tons in any 12 consecutive month period

(2) formaldehyde – 2.53 tons in any 12 consecutive month period

(3) sulfuric acid - 17.70 tons in any 12 consecutive month period

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

- (4) ammonia slip - 138.68 tons in any 12 consecutive month period
- (5) total hazardous air pollutants - 9.94 tons in any 12 consecutive month period

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the emission of visible air contaminants from the exhaust of Control Devices C101 and C101B associated with Source P101 shall not be in excess of 10% opacity for any 3-minute block period for normal operation and 10% opacity for any 6-minute block period for startups/shutdowns.

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source P101 shall be fired on either natural gas or ULSD. The sulfur content of the natural gas shall not exceed 0.4 grains/100 scf and the sulfur content of the ULSD shall not exceed 15 ppm.

**Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source P101 shall only be fired on ULSD fuel no more than 720 hours in any 12 consecutive month period.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12,

- (a) the total combined hours of startups and shutdowns for Source P101 while firing natural gas shall not exceed 460 hours in any 12 consecutive month period.
- (b) the total combined hours of startups and shutdowns for Source P101 while firing ULSD shall not exceed 40 hours in any 12 consecutive month period.

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

(a) Pursuant to the best available control technology requirements of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from Source ID P101 shall not exceed the following limits:

- (1) nitrogen oxides while firing on natural gas:
  - (i) 53 lbs/hot start;
  - (ii) 81 lbs/warm start;
  - (iii) 123 lbs/cold start;
  - (iv) 14 lbs/shutdown;
  - (v) 25.20 tons in any 12-consecutive month period;
- (2) nitrogen oxides while firing on ULSD:

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

- (i) 112 lbs/hot start;
- (ii) 172 lbs/warm start;
- (iii) 221 lbs/cold start;
- (iv) 43 lbs/shutdown;
- (v) 5.40 tons in any 12-consecutive month period;

(3) volatile organic compounds while firing on natural gas:

- (i) 22 lbs/hot start;
- (ii) 24 lbs/warm start;
- (iii) 53 lbs/cold start;
- (iv) 19 lbs/shutdown;
- (v) 11.40 tons in any 12-consecutive month period;

(4) volatile organic compounds while firing on ULSD:

- (i) 30 lbs/hot start;
- (ii) 33 lbs/warm start;
- (iii) 141 lbs/cold start;
- (iv) 7 lbs/shutdown;
- (v) 1.00 tons in any 12-consecutive month period;

(b) Pursuant to best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from Sources P101 and P102 shall not exceed the following limits:

(1) carbon monoxide while firing on natural gas:

- (i) 177 lbs/hot start;
- (ii) 190 lbs/warm start;
- (iii) 699 lbs/cold start;
- (iv) 152 lbs/shutdown;
- (v) 90.80 tons in any 12-consecutive month period;

(2) carbon monoxide while firing on ULSD:

- (i) 273 lbs/hot start;
- (ii) 286 lbs/warm start;
- (iii) 704 lbs/cold start;
- (iv) 48 lbs/shutdown;
- (v) 8.40 tons in any 12-consecutive month period;

(3) total (filterable and condensable) particulate matter (PM<sub>10</sub>/PM<sub>2.5</sub>) while firing on natural gas:

- (i) 4.0 lbs/hot start;
- (ii) 7.3 lbs/warm start;
- (iii) 8.3 lbs/cold start;
- (iv) 3.0 lbs/shutdown;
- (v) 2.70 tons in any 12-consecutive month period;

(4) total (filterable and condensable) particulate matter (PM<sub>10</sub>/PM<sub>2.5</sub>) while firing on ULSD:

- (i) 16 lbs/hot start;
- (ii) 32 lbs/warm start;
- (iii) 36 lbs/cold start;
- (iv) 10 lbs/shutdown;
- (v) 1.10 tons in any 12-consecutive month period;

(d) These emission limits apply only during startup and shutdown events associated with Sources P101 and P102. These emission rates are included as part of, and not in addition to, the annual emission limits for Sources P101 and P102, respectively.

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

(e) For the purposes of demonstrating compliance with these emission limits, the term "startup" and "shutdown" are defined as follows:

- (1) A cold start is defined as a restart occurring 72 hours or more after shutdown and shall not be in excess of 45 minutes in duration.
- (2) A warm start is defined as a restart occurring between 8 to 72 hours after shutdown and shall not be in excess of 40 minutes in duration.
- (3) A hot start is defined as a restart occurring less than 8 hours after shutdown and shall not be in excess of 20 minutes in duration.
- (4) Shutdown is defined as the time from the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine. Shutdown shall not occur for more than 12 minutes in duration.
- (5) The permittee shall record the time, date, justification, and duration of each startup and shutdown.

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

The permittee shall conduct initial EPA reference method testing within 180 days of the startup of Source P101 and subsequent testing every two years from the previous tests for nitrogen oxides, carbon monoxide, ammonia slip, volatile organic compounds (including formaldehyde), sulfur oxides (SO<sub>2</sub>), sulfuric acid mist, total (filterable and condensable) particulate matter, PM<sub>10</sub> and PM<sub>2.5</sub> to demonstrate compliance with the emission limitations specified in this plan approval.

**# 009 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4400.

**# 010 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4405.

**# 011 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4415.

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

(a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide, carbon dioxide and ammonia emissions as well as volumetric flow on the exhaust of Control Devices C101A and C101B associated with Source P101 in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS or flow monitoring system may however be installed unless Phase I approval has first been obtained from the Department.

(b) The permittee shall submit a Phase I application to the Department for all CEMS and flow monitoring systems to be associated with each combined-cycle powerblock at least 180 days prior to the expected commencement of operation of each respective unit.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the inlet temperature, outlet temperature, and pressure differential across Control Device C101A shall be monitored and recorded on a

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

continuous basis. Visual and audible alarms shall be utilized to indicate improper operation.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pre-control and post-control NOx emissions across Control Device C101A shall be monitored by the feed-forward process control loop to ensure maximum achievable control efficiency and minimum ammonia slip.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across Control Device C101B as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis (1-hour average). Visual and audible alarms shall be utilized to indicate improper operation. The pressure differential and temperature ranges will be established based upon the recorded data and the stack testing.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, an oxygen monitor shall be in the exhaust stack to monitor oxygen levels to ensure maximum achievable combustion efficiency.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall monitor the pressure differential across the inlet air filters of Source P101 and record it on a weekly basis.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall monitor the pressure differential across the inlet air filters and record it on a weekly basis.

**# 019 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4340.

**# 020 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4345.

**# 021 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4350.

**# 022 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4360.

**# 023 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4365.

**SECTION D. Source Level Plan Approval Requirements****# 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4370]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How often must I determine the sulfur content of the fuel?**

The permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4370.

**IV. RECORDKEEPING REQUIREMENTS.****# 025 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep records of the following for Source P101:

(1) monitor and keep records of the amount and type of fuel used each month as well as the monthly heat input and hours of operation.

(2) the monthly emissions of sulfur oxides (SO<sub>2</sub>), sulfuric acid mist, total (filterable and condensable) particulate matter, PM<sub>10</sub> and PM<sub>2.5</sub> to demonstrate compliance with the emission limitations.

(b) All information to satisfy this recordkeeping requirement shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

**# 026 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep accurate and comprehensive records of the following to demonstrate compliance with the fuel requirements specified above under part I. Restrictions for Source P101:

(1) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel and ULSD, specifying that the maximum total sulfur content of the natural gas is 0.4 grain/100 scf or less AND minimum percent methane composition equals 70% by volume for natural gas or the fuel has a lower heating value between 950 and 1,100 British thermal units per standard cubic foot for natural gas and the total sulfur content of the ULSD is 15 ppm or less; OR

(2) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 0.4 grain/100 scf AND minimum percent methane composition equals 70% by volume or the fuel has a lower heating value between 950 and 1,100 British thermal units per standard cubic foot and the sulfur content of the ULSD is 15 ppm or less.

(3) With additional authority for this item taken from 40 CFR 70.6, the records of the fuel sampling performed in this paragraph shall include the following;

- (i) The date, place, and time of sampling;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used;
- (v) The results of such analyses; and
- (vi) The operating conditions as existing at the time of sampling or measurement

(b) All information to satisfy this recordkeeping requirement shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

**V. REPORTING REQUIREMENTS.****# 027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]****Subpart A - General Provisions****Address.**

The submission of all requests, reports, applications, submittals and other communications required by the Standards of Performance for New Stationary Sources (40 CFR Part 60) shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

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

R3\_Air\_Apps\_and\_Notices@epa.gov

and

The Pennsylvania Department of Environmental Protection  
Air Quality Program Manager  
208 W. Third Street, Suite 101  
Williamsport, PA 17701-6448

**# 028 [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 permittee shall comply with all applicable reporting requirements specified in 40 CFR Sections 60.4375.

**# 029 [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 permittee shall comply with all applicable reporting requirements specified in 40 CFR Sections 60.4380.

**VI. WORK PRACTICE REQUIREMENTS.**

**# 030 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, Source P101 and Control Devices C101A and C101B shall be maintained and operated in a manner consistent with good air pollution control practices and in accordance with the manufacturer's recommendations as well as manufacturer's maintenance plan.

**# 031 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunctions pursuant to 40 CFR Section 60.4333.

**VII. ADDITIONAL REQUIREMENTS.**

**# 032 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12,

(a) Source P101 is a General Electric model 7AH.02 lean premix DLN natural-gas/ultra-low diesel-fired combustion turbine (CT) and steam turbine (ST) with 1,005 million Btu/hr, natural gas fired duct burners (DB). The CT and ST train is configured in a single shaft alignment and drive one common electric generator capable of producing approximately 620 megawatts (MW) of electricity. The maximum heat input rating of the CT associated with Source P101 shall be no greater than 3,541 MMBtu/hr (high heating value, HHV) firing natural gas and 3,940 MMBtu/hr (HHV) firing on ultra-low sulfur diesel fuel.

(b) Control Device C101A is a selective catalytic reduction (SCR) system

(c) Control Device C101B is an oxidation catalyst.

**# 033 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, high efficiency inlet air filters shall be used in the air inlet section of Source P101. The permittee shall keep on hand a full set on filters to replace any filter(s) due to routine operation.

**SECTION D. Source Level Plan Approval Requirements****# 034 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the combustion turbine incorporated in Source P101 shall be equipped with dry-low-NOx (DLN) combustors.

**# 035 [25 Pa. Code §145.204.]****Incorporation of Federal regulations by reference.**

- (a) The permittee shall comply with the applicable requirements of 40 CFR Part 97.
- (b) The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 97.21(b)(1)(ii).
- (c) The permittee shall comply with the applicable Mandatory GHG Reporting requirements of 40 CFR Part 98.
- (d) The facility shall comply with the requirements in 40 CFR Part 98 Subpart D, (40 CFR Sections 98.40 through 98.48).

**# 036 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4300]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What is the purpose of this subpart?**

Source P101 is subject to the requirements of 40 CFR Part 60 Subpart KKKK Section 60.4300 through 60.4420. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart KKKK Sections 60.4300 through 60.4420.

**# 037 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5508]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****What is the purpose of this subpart?**

Source P101 is subject to the requirements of 40 CFR Part 60 Subpart TTTT Section 60.5508 through 60.5580. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart TTTT Sections 60.5508 through 60.5580.

**# 038 [40 CFR Part 72 Regulations on Permits §40 CFR 72.1]****Subpart A--Acid Rain Program General Provisions****Purpose and scope.**

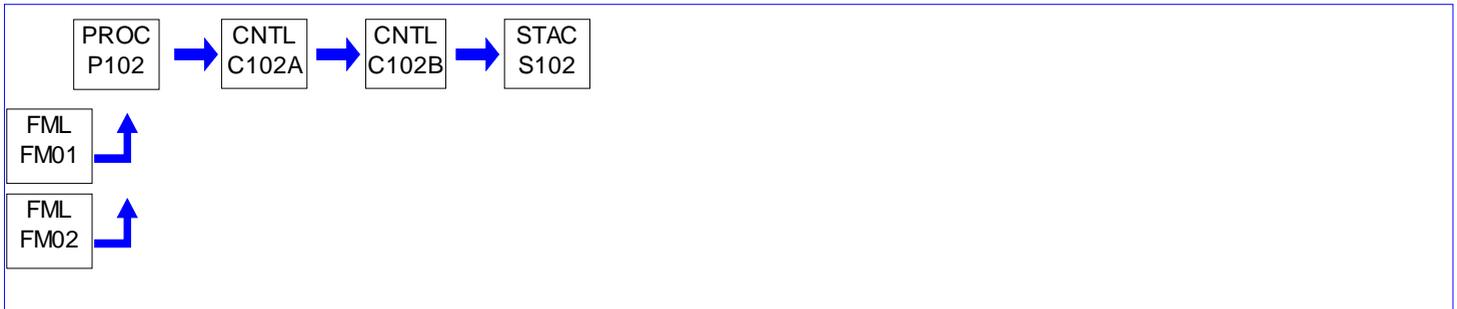
The permittee shall submit a complete Acid Rain (Title IV) permit application in accordance with the deadlines specified in 40 CFR Section 72.30(b)(2)(ii).

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

Source ID: P102

Source Name: COMBUSTION TURBINE #2

Source Capacity/Throughput:

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

[Compliance with the particulate matter and sulfur oxide limitations in this condition will assure compliance with the provisions of 25 Pa. Code Sections 123.13 and 123.21, respectively]

(a) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while firing natural gas:

- (1) nitrogen oxides – 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 33.30 lb/hr
- (2) volatile organic compounds - 0.7 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 3.10 lb/hr for the combustion turbine (CT) only and 1.6 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 9.30 lb/hr for both the CT and duct burners (DB)

(b) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while firing natural gas:

- (1) carbon monoxide - 0.9 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 7.00 lb/hr for the CT only and 1.5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 15.20 lb/hr for both the CT and DB
- (2) total (filterable and condensable) particulate matter having and aerodynamic diameter of 10 micron and 2.5 micron - 0.0050 lb/MMBtu and 22.50 lb/hr

(c) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while firing natural gas:

- (1) sulfur dioxide - 0.0012 lb/MMBtu and 5.43 lb/hr
- (2) formaldehyde – 0.58 lb/hr
- (3) sulfuric acid - 0.0009 lb/MMBtu and 4.07 lb/hr
- (4) ammonia slip - 5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 32.34 lb/hr

(d) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while ULSD:

- (1) nitrogen oxides – 4.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 59.60 lb/hr

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

(2) volatile organic compounds - 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 10.40 lb/hr

(e) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while ULSD:

(1) carbon monoxide - 2.0 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 18.10 lb/hr

(2) total (filterable and condensable) particulate matter including particulate matter with an aerodynamic diameter of 10 micron and 2.5 micron - 0.0122 lb/MMBtu and 48.20 lb/hr

(f) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while ULSD

(1) sulfur dioxide - 0.0018 lb/MMBtu and 7.09 lb/hr

(2) sulfuric acid - 0.0012 lb/MMBtu and 4.62 lb/hr

(3) ammonia slip - 5 ppm<sub>dv</sub> corrected to 15% O<sub>2</sub> and 28.98 lb/hr

(g) The nitrogen oxides, carbon monoxide and ammonia emissions limits shall be established as a one-hour period.

(h) Unless otherwise specified herein, the above emissions limits shall apply at all times except for periods of startup and shutdown.

(i) The applicable sulfur dioxide requirements in 40 CFR Section 60.4330 are streamlined into this permit condition.

(j) The carbon dioxide equivalent (CO<sub>2</sub>e) emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed 894 pounds per Megawatt of electricity produced from Source P102.

**# 002 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

(a) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below:

(1) nitrogen oxides – 177.58 tons in any 12 consecutive month period

(2) volatile organic compounds - 51.22 tons in any 12 consecutive month period

(b) Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below:

(1) carbon monoxide - 162.93 tons in any 12 consecutive month period

(2) total (filterable and condensable) particulate matter - 105.96 tons in any 12 consecutive month period

(3) greenhouse gases - 2,709,297 tons in any 12 consecutive month period

(c) Pursuant to the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not exceed the limits specified below while firing natural gas:

(1) sulfur dioxide - 26.74 tons in any 12 consecutive month period

(2) formaldehyde – 2.53 tons in any 12 consecutive month period

(3) sulfuric acid - 17.70 tons in any 12 consecutive month period

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- (4) ammonia slip - 138.68 tons in any 12 consecutive month period
- (5) total combined hazardous air pollutants - 9.94 tons in any 12 consecutive month period.

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the emission of visible air contaminants from the exhaust of Control Devices C102A and C102B associated with Source P102 shall not be in excess of 10% opacity for any 3-minute block period for normal operation and 10% opacity for any 6-minute block period for startups/shutdowns.

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

(a) Pursuant to the best available control technology requirements of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from Source ID P101 shall not exceed the following limits:

- (1) nitrogen oxides while firing on natural gas:
  - (i) 53 lbs/hot start;
  - (ii) 81 lbs/warm start;
  - (iii) 123 lbs/cold start;
  - (iv) 14 lbs/shutdown;
  - (v) 25.20 tons in any 12-consecutive month period;

- (2) nitrogen oxides while firing on ULSD:
  - (i) 112 lbs/hot start;
  - (ii) 172 lbs/warm start;
  - (iii) 221 lbs/cold start;
  - (iv) 43 lbs/shutdown;
  - (v) 5.40 tons in any 12-consecutive month period;

- (3) volatile organic compounds while firing on natural gas:
  - (i) 22 lbs/hot start;
  - (ii) 24 lbs/warm start;
  - (iii) 53 lbs/cold start;
  - (iv) 19 lbs/shutdown;
  - (v) 11.40 tons in any 12-consecutive month period;

- (4) volatile organic compounds while firing on ULSD:
  - (i) 30 lbs/hot start;
  - (ii) 33 lbs/warm start;
  - (iii) 141 lbs/cold start;
  - (iv) 7 lbs/shutdown;
  - (v) 1.00 tons in any 12-consecutive month period;

(b) Pursuant to best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, emissions from Sources P101 and P102 shall not exceed the following limits:

- (1) carbon monoxide while firing on natural gas:
  - (i) 177 lbs/hot start;
  - (ii) 190 lbs/warm start;

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- (iii) 699 lbs/cold start;
- (iv) 152 lbs/shutdown;
- (v) 90.80 tons in any 12-consecutive month period;

(2) carbon monoxide while firing on ULSD:

- (i) 273 lbs/hot start;
- (ii) 286 lbs/warm start;
- (iii) 704 lbs/cold start;
- (iv) 48 lbs/shutdown;
- (v) 8.40 tons in any 12-consecutive month period;

(3) total (filterable and condensable) particulate matter (PM<sub>10</sub>/PM<sub>2.5</sub>) while firing on natural gas:

- (i) 4.0 lbs/hot start;
- (ii) 7.3 lbs/warm start;
- (iii) 8.3 lbs/cold start;
- (iv) 3.0 lbs/shutdown;
- (v) 2.70 tons in any 12-consecutive month period;

(4) total (filterable and condensable) particulate matter (PM<sub>10</sub>/PM<sub>2.5</sub>) while firing on ULSD:

- (i) 16 lbs/hot start;
- (ii) 32 lbs/warm start;
- (iii) 36 lbs/cold start;
- (iv) 10 lbs/shutdown;
- (v) 1.10 tons in any 12-consecutive month period;

(d) These emission limits apply only during startup and shutdown events associated with Sources P101 and P102. These emission rates are included as part of, and not in addition to, the annual emission limits for Sources P101 and P102, respectively.

(e) For the purposes of demonstrating compliance with these emission limits, the term “startup” and “shutdown” are defined as follows:

- (1) A cold start is defined as a restart occurring 72 hours or more after shutdown and shall not be in excess of 45 minutes in duration.
- (2) A warm start is defined as a restart occurring between 8 to 72 hours after shutdown and shall not be in excess of 40 minutes in duration.
- (3) A hot start is defined as a restart occurring less than 8 hours after shutdown and shall not be in excess of 20 minutes in duration.
- (4) Shutdown is defined as the time from the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine. Shutdown shall not occur for more than 12 minutes in duration.
- (5) The permittee shall record the time, date, justification, and duration of each startup and shutdown.

**Fuel Restriction(s).**

**# 005 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source P102 shall be fired on either natural gas or ULSD. The sulfur content of the natural gas shall not exceed 0.4 grains/100 scf and the sulfur content of the ULSD shall not exceed 15 ppm.

**Operation Hours Restriction(s).**

**# 006 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation

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provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, Source P102 shall only be fired on ULSD fuel no more than 720 hours in any 12 consecutive month period.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12,

(a) the total combined hours of startups and shutdowns for Source P102 while firing natural gas shall not exceed 460 hours in any 12 consecutive month period.

(b) the total combined hours of startups and shutdowns for Source P102 while firing ULSD shall not exceed 40 hours in any 12 consecutive month period.

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

The permittee shall conduct initial EPA reference method testing within 180 days of the startup of Source P102 and subsequent testing every two years from the previous tests for nitrogen oxides, carbon monoxide, ammonia slip, volatile organic compounds (including formaldehyde), sulfur oxides (SO<sub>2</sub>), sulfuric acid mist, total (filterable and condensable) particulate matter, PM<sub>10</sub> and PM<sub>2.5</sub> to demonstrate compliance with the emission limitations specified in this plan approval.

**# 009 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4400.

**# 010 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4405.

**# 011 [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 permittee shall comply with all applicable testing requirements specified in 40 CFR Sections 60.4415.

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

(a) The permittee shall install, certify, maintain and operate continuous emission monitoring systems (CEMS) for nitrogen oxides, carbon monoxide, carbon dioxide and ammonia emissions as well as volumetric flow on the exhaust of Control Devices C102A and C102B associated with Source P102 in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the Department's "Continuous Source Monitoring Manual." No CEMS or flow monitoring system may however be installed unless Phase I approval has first been obtained from the Department.

(b) The permittee shall submit a Phase I application to the Department for all CEMS and flow monitoring systems to be associated with each combined-cycle powerblock at least 180 days prior to the expected commencement of operation of each respective unit.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the inlet temperature,

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outlet temperature, and pressure differential across Control Device C102A shall be monitored and recorded on a continuous basis. Visual and audible alarms shall be utilized to indicate improper operation.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pre-control and post-control NO<sub>x</sub> emissions across Control Device C102A shall be monitored by the feed-forward process control loop to ensure maximum achievable control efficiency and minimum ammonia slip.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the pressure differential across Control Device C102B as well as the catalyst inlet and outlet temperatures shall be monitored and recorded on a continuous basis (1-hour average). Visual and audible alarms shall be utilized to indicate improper operation. The pressure differential and temperature ranges will be established based upon the recorded data and the stack testing.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, an oxygen monitor shall be in the exhaust stack to monitor oxygen levels to ensure maximum achievable combustion efficiency.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall monitor the pressure differential across the inlet air filters of Source P102 and record it on a weekly basis.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall monitor the pressure differential across the inlet air filters and record it on a weekly basis.

**# 019 [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 NO<sub>x</sub> if I do not use water or steam injection?**

The permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4340.

**# 020 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4345.

**# 021 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4350.

**# 022 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4360.

**# 023 [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 permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4365.

**SECTION D. Source Level Plan Approval Requirements****# 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4370]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How often must I determine the sulfur content of the fuel?**

The permittee shall comply with all applicable monitoring requirements specified in 40 CFR Sections 60.4370.

**IV. RECORDKEEPING REQUIREMENTS.****# 025 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep records of the following for Source P102:

(1) monitor and keep records of the amount and type of fuel used each month as well as the monthly heat input and hours of operation.

(2) the monthly emissions of sulfur oxides (SO<sub>2</sub>), sulfuric acid mist, total (filterable and condensable) particulate matter, PM<sub>10</sub> and PM<sub>2.5</sub> to demonstrate compliance with the emission limitations.

(b) All information to satisfy this recordkeeping requirement shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

**# 026 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep accurate and comprehensive records of the following to demonstrate compliance with the fuel requirements specified above under part I. Restrictions for Source P102:

(1) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel and ULSD, specifying that the maximum total sulfur content of the natural gas is 0.4 grain/100 scf or less AND minimum percent methane composition equals 70% by volume for natural gas or the fuel has a lower heating value between 950 and 1,100 British thermal units per standard cubic foot for natural gas and the total sulfur content of the ULSD is 15 ppm or less; OR

(2) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 0.4 grain/100 scf AND minimum percent methane composition equals 70% by volume or the fuel has a lower heating value between 950 and 1,100 British thermal units per standard cubic foot and the sulfur content of the ULSD is 15 ppm or less.

(3) With additional authority for this item taken from 40 CFR 70.6, the records of the fuel sampling performed in this paragraph shall include the following;

- (i) The date, place, and time of sampling;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used;
- (v) The results of such analyses; and
- (vi) The operating conditions as existing at the time of sampling or measurement

(b) All information to satisfy this recordkeeping requirement shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

**V. REPORTING REQUIREMENTS.****# 027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]****Subpart A - General Provisions****Address.**

The submission of all requests, reports, applications, submittals and other communications required by the Standards of Performance for New Stationary Sources (40 CFR Part 60) shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

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

R3\_Air\_Apps\_and\_Notices@epa.gov

and

The Pennsylvania Department of Environmental Protection  
Air Quality Program Manager  
208 W. Third Street, Suite 101  
Williamsport, PA 17701-6448

**# 028 [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 permittee shall comply with all applicable reporting requirements specified in 40 CFR Sections 60.4375.

**# 029 [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 permittee shall comply with all applicable reporting requirements specified in 40 CFR Sections 60.4380.

**VI. WORK PRACTICE REQUIREMENTS.**

**# 030 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, Source P101 and Control Devices C102A and C102B shall be maintained and operated in a manner consistent with good air pollution control practices and in accordance with the manufacturer's recommendations as well as manufacturer's maintenance plan.

**# 031 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunctions pursuant to 40 CFR Section 60.4333.

**VII. ADDITIONAL REQUIREMENTS.**

**# 032 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83, as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12,

(a) Source P102 is a General Electric model 7AH.02 lean premix DLN natural-gas/ultra-low diesel-fired combustion turbine (CT) and steam turbine (ST) with 1,005 million Btu/hr, natural gas fired duct burners (DB). The CT and ST train is configured in a single shaft alignment and drive one common electric generator capable of producing approximately 620 megawatts (MW) of electricity. The maximum heat input rating of the CT associated with Source P101 shall be no greater than 3,541 MMBtu/hr (high heating value, HHV) firing natural gas and 3,940 MMBtu/hr (HHV) firing on ultra-low sulfur diesel fuel.

(b) Control Device C102A is a selective catalytic reduction (SCR) system

(c) Control Device C102B is an oxidation catalyst.

**# 033 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, high efficiency inlet air filters shall be used in the air inlet section of Source P102. The permittee shall keep on hand a full set on filters to replace any filter(s) due to routine operation.

**SECTION D. Source Level Plan Approval Requirements****# 034 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the combustion turbine incorporated in Source P102 shall be equipped with dry-low-NOx (DLN) combustors.

**# 035 [25 Pa. Code §145.204.]****Incorporation of Federal regulations by reference.**

- (a) The permittee shall comply with the applicable requirements of 40 CFR Part 97.
- (b) The permittee shall submit a complete NOx Budget permit application in accordance with 40 CFR Section 97.21(b)(1)(ii).
- (c) The permittee shall comply with the applicable Mandatory GHG Reporting requirements of 40 CFR Part 98.
- (d) The facility shall comply with the requirements in 40 CFR Part 98 Subpart D, (40 CFR Sections 98.40 through 98.48).

**# 036 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4300]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What is the purpose of this subpart?**

Source P102 is subject to the requirements of 40 CFR Part 60 Subpart KKKK Section 60.4300 through 60.4420. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart KKKK Sections 60.4300 through 60.4420.

**# 037 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5508]****Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units****What is the purpose of this subpart?**

Source P102 is subject to the requirements of 40 CFR Part 60 Subpart TTTT Section 60.5508 through 60.5580. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart TTTT Sections 60.5508 through 60.5580.

**# 038 [40 CFR Part 72 Regulations on Permits §40 CFR 72.1]****Subpart A--Acid Rain Program General Provisions****Purpose and scope.**

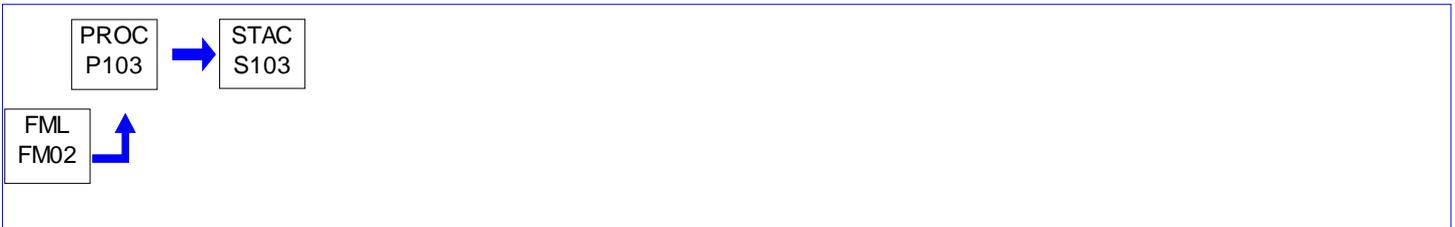
The permittee shall submit a complete Acid Rain (Title IV) permit application in accordance with the deadlines specified in 40 CFR Section 72.30(b)(2)(ii).

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

Source ID: P103

Source Name: EMERGENCY GENERATOR ENGINE

Source Capacity/Throughput:

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

[Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.13]

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of Source P103 shall not exceed the following limitations:

- (a) nitrogen oxides (NO<sub>x</sub>, expressed as NO<sub>2</sub>) – 4.48 g/hp-hr and 5.45 tpy
- (b) carbon monoxide (CO) – 1.23 g/hp-hr and 1.50 tpy
- (c) volatile organic compound (expressed as THC) – 0.80 g/hp-hr and 0.97 tpy
- (d) total particulate matter (filterable and condensable) – 0.13 g/hp-hr and 0.16 tpy

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

[Compliance with this condition will assure compliance with the provisions of 25 Pa. Code Section 123.41]

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the visible emissions from Source P103 shall not exceed 15% for any 3-minute block period and 50% at any time.

**# 003 [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**

The permittee shall operate and maintain Source P103 to achieve the emission standards specified in 40 CFR Section 89.112 and 89.113 over the entire life of the engine. Any testing used to verify compliance with this work practice restriction shall be performed in accordance with 40 CFR Part 60 Subpart III, including 40 CFR Section 60.4212, and Department-approved test methods and procedures.

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

[Compliance with this condition will assure compliance with the provisions of 25 Pa. Code Section 123.21]

Pursuant to best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall only use ultra-low sulfur diesel fuel (15 ppm sulfur maximum) pursuant to 40 CFR Part 80 Subpart I, to operate Source P103.

**SECTION D. Source Level Plan Approval Requirements****Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.12b]  
Plan approval terms and conditions.**

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12,

- (a) The duration of each readiness test associated with the engines shall be no more than 30 minutes.
- (b) There shall be no simultaneous readiness testing of the engine-generator and fire pump engine within the same hour.
- (c) There shall be no readiness testing of the engines during the startup or shutdown of the combined-cycle powerblocks

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217, Source P103 shall not be operated greater than 500 hours in any 12 consecutive month period.

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

Pursuant to best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, Source P103 shall be equipped with a non-resettable hour meter that accurately monitors the engine's hours of operation.

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

(a) The permittee shall record the hours that Source P103 operated through the non-resettable hour meter and shall calculate the 12-consecutive month total hours of operation, including supporting documentation, to verify compliance with the operational restriction specified in this permit on a monthly basis. Additionally, the permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(b) The information used to demonstrate compliance with this condition shall be kept for a minimum of five years and shall be made available to the Department upon request.

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

The permittee shall keep accurate and comprehensive records of the following information for Source P103:

- (a) the supporting information and calculations used to demonstrate that the emissions of particulate matter and sulfur oxides from the exhaust of the engine comply with the best available technology emissions limitations as well as the requirements in 25 Pa. Code Section 123.13 and 123.21, respectively;
- (b) the fuel certification reports for each delivery of diesel fuel
- (c) the stack test reports, if required.

**V. REPORTING REQUIREMENTS.****# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]  
Subpart A - General Provisions  
Address.**

The submission of all requests, reports, applications, submittals and other communications required by the Standards of

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

Performance for New Stationary Sources (40 CFR Part 60) shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

R3\_Air\_Apps\_and\_Notices@epa.gov

and

The Pennsylvania Department of Environmental Protection  
Air Quality Program Manager  
208 W. Third Street, Suite 101  
Williamsport, PA 17701-6448

**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.**

**# 011 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Source P103 is a 2,206 brake horsepower diesel-fired emergency generator engine.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]**

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

**Am I subject to this subpart?**

Source P103 is subject to the requirements of 40 CFR Part 60 Subpart IIII Sections 60.4200 through 60.4219. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart IIII Sections 60.4200 through 60.4219.

**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4210]**

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

**What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?**

Source P103 shall meet the labeling requirements in Section 60.4210(f).

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**

**Subpart IIII - 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?**

Source P103 shall be installed and configured according to the manufacturer's emission-related specifications.

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

Source ID: P104

Source Name: FIRE PUMP ENGINE

Source Capacity/Throughput:

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

[Compliance with the particulate matter limitation in this condition will assure compliance with the provisions of 25 Pa. Code Section 123.13]

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217 as well as the best available technology provisions in 25 Pa. Code Sections 127.1 and 127.12, the air contaminant emissions from the exhaust of Source P104 shall not exceed the following limitations:

- (a) nitrogen oxides (expressed as NO<sub>2</sub>) – 2.7 g/bhp-hr and 0.18 tpy
- (b) carbon monoxide – 0.90 g/bhp-hr and 0.06 tpy
- (c) volatile organic compound (expressed as THC) – 0.10 g/bhp-hr and 0.01 tpy
- (d) total particulate matter (filterable and condensable) – 0.10 g/bhp-hr and 0.01 tpy

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine**

The permittee shall operate and maintain Source P103 and P104 to achieve the emission standards specified in 40 CFR Section 89.112 and 89.113 over the entire life of the engine. Any testing used to verify compliance with this work practice restriction shall be performed in accordance with 40 CFR Part 60 Subpart III, including 40 CFR Section 60.4212, and Department-approved test methods and procedures.

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

Pursuant to the best available technology requirements of 25 Pa. Code Section 127.1 and 127.12,

- (a) The duration of each readiness test associated with the engines shall be no more than 30 minutes.
- (b) There shall be no simultaneous readiness testing of the engine-generator and fire pump engine within the same hour.
- (c) There shall be no readiness testing of the engines during the startup or shutdown of the combined-cycle powerblocks

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

Pursuant to the best available control technology of the Prevention of Significant Deterioration provisions in 40 CFR Section 52.21 and of 25 Pa. Code Section 127.83 and the lowest achievable emission rate of the New Source Review Regulation provisions in 25 Pa. Code Sections 127.201 through 127.217, Source P104 shall not be operated greater than 250 hours in any 12 consecutive month period.

**SECTION D. Source Level Plan Approval Requirements****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Compliance with this condition will assure compliance with the provisions of 25 Pa. Code Section 123.21]

Pursuant to best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, the permittee shall only use ultra-low sulfur diesel fuel (15 ppm sulfur maximum) pursuant to 40 CFR Part 80 Subpart I, to operate Source P104.

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

Pursuant to best available technology requirements of 25 Pa. Code Section 127.1 and 127.12, Source P104 shall be equipped with a non-resettable hour meter that accurately monitors the engine's hours of operation.

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

(a) The permittee shall record the hours that Source P104 operated through the non-resettable hour meter and shall calculate the 12-consecutive month total hours of operation, including supporting documentation, to verify compliance with the operational restriction specified in this permit on a monthly basis. Additionally, the permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(b) The information used to demonstrate compliance with this condition shall be kept for a minimum of five years and shall be made available to the Department upon request.

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

The permittee shall keep accurate and comprehensive records of the following information for Source P103 and P104:

- (a) the supporting information and calculations used to demonstrate that the emissions of particulate matter and sulfur oxides from the exhaust of the engine comply with the best available technology emissions limitations as well as the requirements in 25 Pa. Code Section 123.13 and 123.21, respectively;
- (b) the fuel certification reports for each delivery of diesel fuel
- (c) the stack test reports, if required

**V. REPORTING REQUIREMENTS.****# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]****Subpart A - General Provisions****Address.**

The submission of all requests, reports, applications, submittals and other communications required by the Standards of Performance for New Stationary Sources (40 CFR Part 60) shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

R3\_Air\_Apps\_and\_Notices@epa.gov

and

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

The Pennsylvania Department of Environmental Protection  
 Air Quality Program Manager  
 208 W. Third Street, Suite 101  
 Williamsport, PA 17701-6448

**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.**

**# 010 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Source P104 is a 237 brake horsepower diesel-fired fire pump engine.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4210]**

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

**What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?**

Source P104 shall meet the labeling requirements in Section 60.4210(f).

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**

**Subpart IIII - 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?**

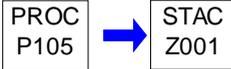
Source P104 shall be installed and configured according to the manufacturer's emission-related specifications.

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

Source ID: P105

Source Name: STORAGE TANKS

Source Capacity/Throughput:

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

The permittee shall not store any liquid containing volatile organic compounds (VOC) with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in the 3,500,000-gallon ultra-low diesel fuel storage tank incorporated in Source P105 unless the tank is equipped with pressure relief valve which is maintained in good operating condition and which are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum, or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

**# 002 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall not store any liquid containing volatile organic compounds (VOC) with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in the 3,500,000 ultra-low sulfur diesel fuel storage tank associated with Source P105.

**# 003 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

The permittee shall not store any liquid containing volatile organic compounds (VOC) with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in the two (2) 20,000-gallon aqueous ammonia and two (2) lube oil storage tanks associated with Source P105 unless each of the tanks are equipped with pressure relief valve which is maintained in good operating condition and which are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum, or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department

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

(a) The permittee shall keep a record of the vapor pressure of the contents of each storage tank associated with Source P105 unless the respective tank is equipped with pressure relief valves that meets the requirement in this permit relating to pressure release settings.

(b) All information used to demonstrate compliance with this permit condition shall kept for minimum of five (5) years and shall be made available to the Department upon request.

**SECTION D. Source Level Plan Approval Requirements****V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

**# 005 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

Source P105 consists of the following storage tanks:

- (a) One (1) 3,500,000-gallon ultra-low sulfur diesel fuel storage tank,
- (b) Two (2) 26,000-gallon aqueous ammonia storage tanks
- (c) Two (2) 20,000-gallon lube oil storage tank.



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

No Source Groups exist for this permit.



**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this permit.



**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

The following air contaminant sources are considered to be insignificant emission sources and have been determined to be exempt from permit requirements. This determination does not however exempt the sources from the need to comply with all applicable federal regulations and all applicable regulations specified in 25 Pa. Code Chapters 121-145:

- One (1) 2,500-gallon ultra-low diesel fuel storage tank
- One (1) 250-gallon ultra-low diesel fuel storage tank



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

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