



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date: September 14, 2021 Effective Date: September 14, 2021
Expiration Date: September 13, 2026

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 08-00052

Natural Minor

Federal Tax Id - Plant Code: 38-3944800-1

Owner Information

Name: REV LNG SSL BC LLC
Mailing Address: C/O BHE GT&S LLC (NICHE LNG LLC)
6603 W BROAD ST
RICHMOND, VA 23230

Plant Information

Plant: REV LNG SSL BC LLC/NICHE LNG LLC - TOWANDA FAC
Location: 08 Bradford County 08917 Herrick Township
SIC Code: 4925 Trans. & Utilities - Gas Production And/Or Distribution

Responsible Official

Name: JAMES MCPHERSON
Title: DIR-LNG OPR
Phone: (757) 390 - 7518 Email: James.McPherson@bhegts.com

Permit Contact Person

Name: JOSEPH PIETRO
Title: ENV CONSULTANT
Phone: (804) 310 - 0745 Email: Joseph.Pietro@bhegts.com

[Signature] _____
MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION



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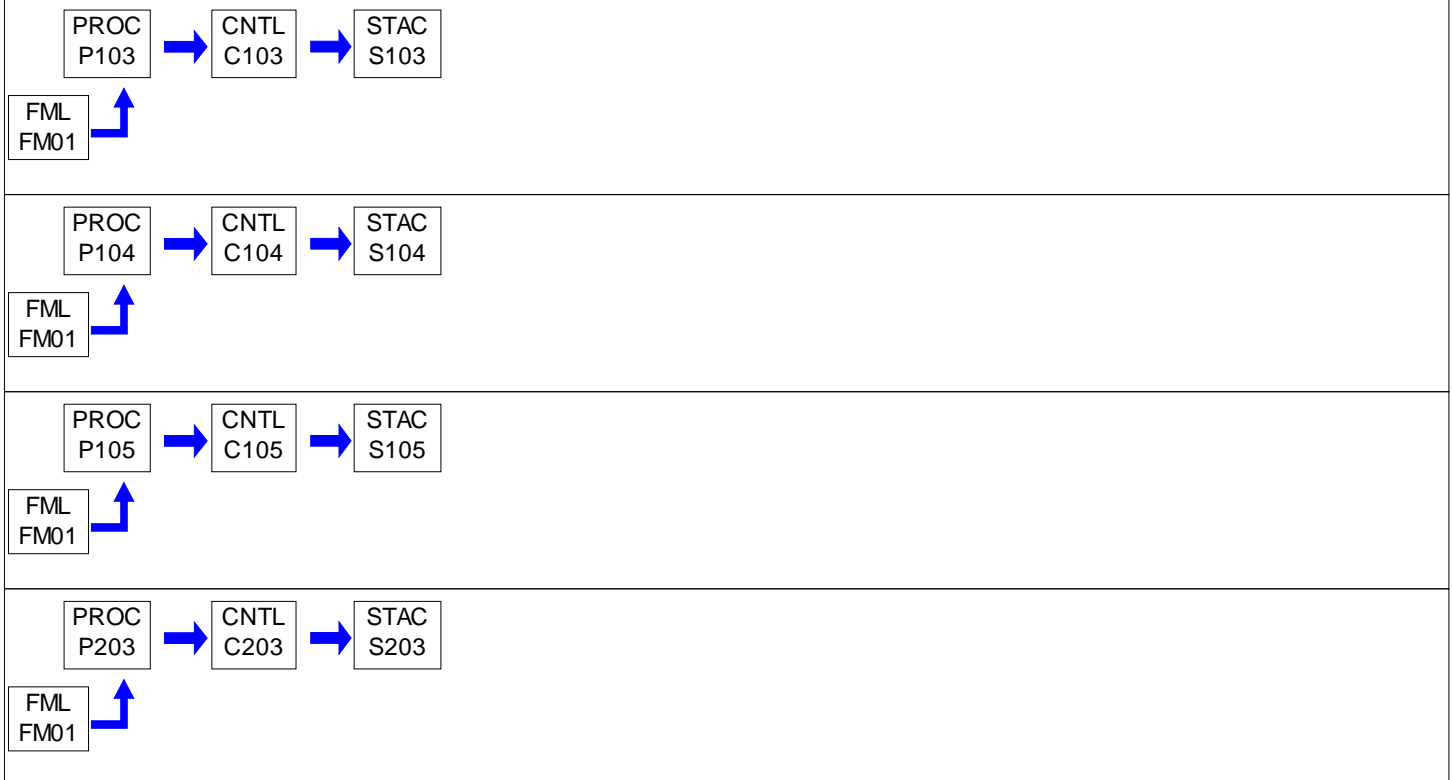
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
P103	2175 BHP CATERPILLAR G3516C ENGINE #1	N/A	Natural Gas
P104	2175 BHP CATERPILLAR G3516C ENGINE #2	N/A	Natural Gas
P105	2175 BHP CATERPILLAR G3516C ENGINE #3	N/A	Natural Gas
P203	302 BHP DOOSAN D111TIC ENGINE	N/A	Natural Gas
C103	CATALYTIC OXIDIZER		
C104	CATALYTIC OXIDIZER		
C105	CATALYTIC OXIDIZER		
C203	DOOSAN ENGINE CATALYST		
FM01	NATURAL GAS		
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S104	ENGINE #2 STACK		
S105	ENGINE #3 STACK		
S203	DOOSAN ENGINE STACK		

PERMIT MAPS

**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

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

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

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

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

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

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

- (a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.
 - (1) For a synthetic minor facility, a fee equal to:
 - (i) Four thousand dollars (\$4,000) for calendar years 2021—2025.
 - (ii) Five thousand dollars (\$5,000) for calendar years 2026—2030.
 - (iii) Six thousand three hundred dollars (\$6,300) for the calendar years beginning with 2031.

**SECTION B. General State Only Requirements**

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

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

(b) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

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

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

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

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

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

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

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

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

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

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

**SECTION B. General State Only Requirements**

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

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

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

(e) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Section 127.14 (relating to exemptions)

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

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

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

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

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

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

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

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

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

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

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

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

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

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

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

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

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

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

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

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

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

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

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

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of fugitive air contaminants 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 emission 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,
- (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**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Condition #001(1)-(8) above, if the emissions are visible at the point the emissions pass outside the person's property.

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

A person may 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 of 25 Pa. Code Section 123.41 shall not apply when:

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

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

The nitrogen oxides (NOx) emissions from all exempt engines at this facility shall be less than 100 lbs/hr, 1,000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis. The exempt engines at the facility include Source ID P203.

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

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. Electronic copies shall be sent to the Northcentral Regional Office Air Quality Program Manager and the PSIMS Administrator in Central Office. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, at least 15 calendar days prior to commencing an emission testing program,

**SECTION C. Site Level Requirements**

notification as to the date and time of testing shall be given to the Northcentral 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) If applicable, pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 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 § 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 § 139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

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

(g) Pursuant to 25 Pa. Code § § 139.53(a)(1) and 139.53(a)(3), electronic copies of all submittals, besides notifications, shall be sent to the Northcentral Regional Office Air Quality Program Manager, with deadlines verified. In addition, an electronic copy shall be sent to the PSIMS Administrator in Central Office. Email addresses are provided on the PADEP website.

(h) 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.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

For each natural gas fugitive emissions high pressure (~900 psig or higher) component at this facility, the following applies:

- (a) No later than 30 days after an emission source commences operation, and at least monthly thereafter, the permittee shall conduct an AVO (Auditory, Visual or Olfactory) inspection.
- (b) On a quarterly basis, the owner or operator shall conduct an LDAR (Leak Detection And Repair) program using either an OGI (Optical Gas Imaging) camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring.
- (i) The permittee may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the DEP Northcentral Regional Office.
- (ii) Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the facility's monitoring log.
- (c) The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.
- (d) A leak is defined as:
 - (i) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;
 - (ii) Any visible emissions detected by an OGI camera calibrated according to 40 CFR § 60.18 and a detection sensitivity level of 60 grams/hour; or
 - (iii) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.

**SECTION C. Site Level Requirements**

- (e) For quarterly inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the permittee may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.
- (f) Any leak detected from a fugitive emission component shall be repaired by the permittee as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:
- (i) The permittee must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or
 - (ii) The repair or replacement is technically infeasible, would require a vent blowdown, a facility shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled facility shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.
- (g) Once a fugitive emission component has been repaired or replaced, the permittee must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.
- (i) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.
 - (ii) A leak is considered repaired if:
 - (A) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;
 - (B) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;
 - (C) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour; or
 - (D) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21.

008 [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.

009 [25 Pa. Code §139.11]**General requirements.**

- (a) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.
- (b) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum, all of the following:
- (1) A thorough source description, including a description of any air cleaning devices and the flue,
 - (2) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions, which may effect emissions from the process,
 - (3) The location of sampling ports,
 - (4) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage of CO, CO₂, O₂ and N₂), static and barometric pressures,
 - (5) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met,
 - (6) Laboratory procedures and results,
 - (7) Calculated results.

**SECTION C. Site Level Requirements****III. MONITORING REQUIREMENTS.****# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

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

- (a) The permittee shall conduct a weekly 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.
- (c) The permittee need not conduct the inspection identified in condition (a) above anytime the facility is not in operation for an entire week.

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

- (a) The permittee shall keep records of the weekly inspections required pursuant to this permit. The records shall include the name of the company representative performing each inspection, the date and time of each inspection, a description of any visible air contaminant emission, fugitive air contaminant emission or malodorous air contamination observed to be in excess of an emission limit, the name of the facility manager to whom notice of any observed excessive emission was given, a description of any corrective action taken to eliminate/reduce any observed excessive emission and the date and time any such corrective action taken. If no inspection is conducted during a week, the records shall indicate that no inspection was conducted because no air contamination sources were operated during that week.
- (b) Should a weekly inspection not be conducted due to this facility not operating for an entire week, the records identified in (a) above shall identify the specific week that the facility was not in operation.
- (c) These records shall be maintained for a minimum of five (5) years and be made available to the Department upon request.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall keep records of the emission estimates and supporting calculations on a monthly basis used to verify compliance with the carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM), sulfur oxides (SO_x), volatile organic compounds (VOCs), individual hazardous air pollutant (HAP), and combined hazardous air pollutants (HAPs) emissions limitations in any 12 consecutive month period for all sources at the facility.
- (b) These records shall be maintained for a minimum of 5 years and made available to the Department upon request.

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

- (a) The permittee shall maintain a log for the results of each monthly AVO and quarterly LDAR inspection, including date of each inspection performance and the name of the company representative performing the inspection.
- (b) Leaks, repair methods and repair delays shall be recorded and maintained for a period of five years.
- (c) All information generated to satisfy this recordkeeping condition shall be kept for a minimum of 5 years and shall be made available to the Department upon request.

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

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) and/or the National Emissions Standards for Hazardous Air Pollutants (40 CFR Part 63) 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. The Pennsylvania

**SECTION C. Site Level Requirements**

Department of Environmental Protection copies may be emailed to the Northcentral Regional Air Quality Program Manager. Email addresses are provided on the PA DEP website.

016 [25 Pa. Code §127.442]**Reporting requirements.**

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions 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. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.
- (c) The report shall describe the following:
1. name, permit or authorization number, and location of the facility,
 2. nature and cause of the malfunction, emergency or incident,
 3. date and time when the malfunction, emergency or incident was first observed,
 4. expected duration of excess emissions,
 5. estimated rate of emissions,
 6. corrective actions or preventative measures taken.
- (d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.
- (e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.
- (f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

VI. WORK PRACTICE REQUIREMENTS.**# 017 [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.



SECTION C. Site Level Requirements

VII. ADDITIONAL REQUIREMENTS.

<p># 018 [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).</p>
<p># 019 [25 Pa. Code §123.31] Limitations The permittee shall not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.</p>
<p># 020 [25 Pa. Code §129.14] Open burning operations The permittee shall not permit the open burning of material at the facility unless in accordance with 25 Pa. Code Section 129.14.</p>

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Requirements**

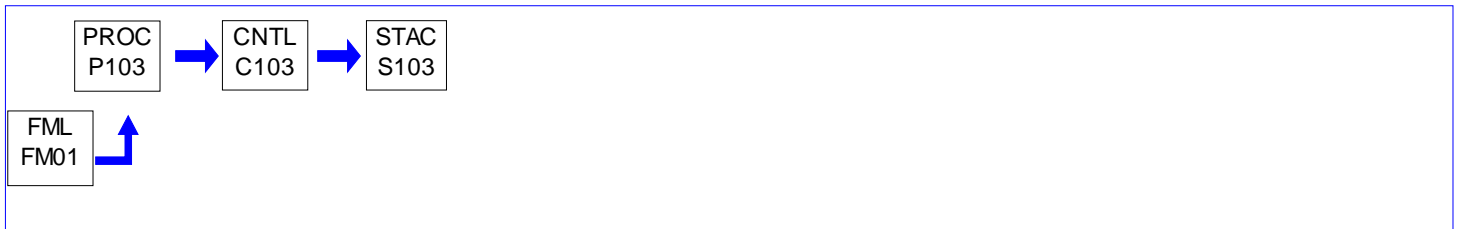
Source ID: P103

Source Name: 2175 BHP CATERPILLAR G3516C ENGINE #1

Source Capacity/Throughput:

N/A

Natural Gas

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 25 Pa. Code Section 123.41.]

The emission of visible air contaminants into the outdoor atmosphere from Source ID P103 shall not occur in such a manner that the opacity of the emission is either of the following:

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

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ.]

The air contaminant emissions from Source ID P103 shall not exceed the following limitations:

- (a) nitrogen oxides (NO_x, expressed as NO₂) - 0.50 grams per brake horsepower-hour and 10.50 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) – 0.20 grams per brake horsepower-hour and 4.20 tons in any 12 consecutive month period,
- (c) volatile organic compounds (VOCs), excluding formaldehyde – 0.15 grams per brake horsepower-hour and 3.15 tons in any 12 consecutive month period,
- (d) sulfur oxides (SO_x, expressed as SO₂) – 0.000588 pounds per million Btu and 0.04 tons in any 12 consecutive month period,
- (e) particulate matter (PM/PM₁₀/PM_{2.5}) – 0.00999 pounds per million Btu and 0.74 tons in any 12 consecutive month period,
- (f) formaldehyde – 0.05 grams per brake horsepower-hour and 1.05 tons in any 12 consecutive month period.

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P103 shall be fired only on natural gas.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Compliance with this streamlined condition satisfies the subsequent performance testing requirements specified in 40 CFR 60.4243(b)(2)(ii).]

The permittee shall conduct performance testing on Source ID P103 every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate compliance with the NO_x, CO and VOC emissions limitations specified in this permit.

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

(a) Every 2,500 hours of operation the permittee shall perform periodic monitoring for NO_x and CO emissions to verify the continued compliance of Source ID P103.

(b) When conducting periodic monitoring on Source ID P103, the permittee may follow the procedures in (c) below. If the permittee decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the permittee must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.

(c) Standardized Periodic Monitoring Procedure:

(i) Conduct three test runs of at least 20 minutes duration within 10% of 100% peak (or the highest achievable) load.

(ii) Determine NO_x and CO emissions and O₂ concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522.

(iii) If the measured NO_x or CO emissions concentrations are in excess of the emissions limitations specified in this permit, the permittee must perform a stack test within 180 days of the periodic monitoring.

(d) The 2,500 hours of operation count resets after any stack test performed.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The permittee shall continuously monitor the following parameters whenever Source ID P103 is in operation:

(a) hours of operation, utilizing a non-resettable hour meter,

(b) the combustion air and natural gas fuel flow rates, utilizing an air-to-fuel rate controller.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The EMIT Technologies RT-3615-H catalytic oxidizer, ID C103, shall be equipped with a catalyst bed temperature monitor/readout. Should the monitor detect a catalyst inlet temperature greater than or equal to 1,250 degrees F, a visual and/or audible alarm will be activated.

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

(a) The permittee shall maintain comprehensive, accurate records of the following:

(i) The emissions estimates and supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, particulate matter, sulfur oxide, and formaldehyde emission limitations for Source ID P103 in any 12 consecutive month period.

**SECTION D. Source Level Requirements**

- (ii) The hours of operation of Source ID P103 on monthly basis.
 - (iii) The inlet gas temperature of the catalytic oxidizer (C103) on a continuous basis via a data acquisition system.
- (b) These records shall be maintained for a minimum of five years and made available to the Department upon request.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

The permittee shall maintain a copy of the maintenance plan and records of the maintenance conducted on Source ID P103.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

In accordance with 40 CFR 60.4243(b)(2)(ii), the permittee shall operate Source ID P103 in a manner consistent with good air pollution control practice for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P103 is a 2,175 bhp Caterpillar G3516C, four stroke, ultra lean burn, natural gas-fired engine equipped with a Catalytic Combustion or equivalent catalytic oxidizer (ID C103) for the control of carbon monoxide and volatile organic compounds.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Am I subject to this subpart?

Source ID P103 is subject to the requirements of the Standards of Performance for Stationary Spark Ignition Internal combustion Engines pursuant to 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Am I subject to this subpart?

Source ID P103 is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines pursuant to 40 CFR Part 63 Subpart ZZZZ Section 63.6580 through 63.6675. In accordance with 40 CFR 63.6590(c)(1), Source ID P103 must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart JJJJ.

**SECTION D. Source Level Requirements**

Source ID: P104

Source Name: 2175 BHP CATERPILLAR G3516C ENGINE #2

Source Capacity/Throughput:

N/A

Natural Gas

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 25 Pa. Code Section 123.41.]

The emission of visible air contaminants into the outdoor atmosphere from Source ID P104 shall not occur in such a manner that the opacity of the emission is either of the following:

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

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ.]

The air contaminant emissions from Source ID P104 shall not exceed the following limitations:

- (a) nitrogen oxides (NO_x, expressed as NO₂) - 0.50 grams per brake horsepower-hour and 10.50 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) – 0.20 grams per brake horsepower-hour and 4.20 tons in any 12 consecutive month period,
- (c) volatile organic compounds (VOCs), excluding formaldehyde – 0.15 grams per brake horsepower-hour and 3.15 tons in any 12 consecutive month period,
- (d) sulfur oxides (SO_x, expressed as SO₂) – 0.000588 pounds per million Btu and 0.04 tons in any 12 consecutive month period,
- (e) particulate matter (PM/PM₁₀/PM_{2.5}) – 0.00999 pounds per million Btu and 0.74 tons in any 12 consecutive month period,
- (f) formaldehyde – 0.05 grams per brake horsepower-hour and 1.05 tons in any 12 consecutive month period.

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P104 shall be fired only on natural gas.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Compliance with this streamlined condition satisfies the subsequent performance testing requirements specified in 40 CFR 60.4243(b)(2)(ii).]

The permittee shall conduct performance testing on Source ID P104 every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate compliance with the NOx, CO and VOC emissions limitations specified in this permit.

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

(a) Every 2,500 hours of operation the permittee shall perform periodic monitoring for NOx and CO emissions to verify the continued compliance of Source ID P104.

(b) When conducting periodic monitoring on Source ID P104, the permittee may follow the procedures in (c) below. If the permittee decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the permittee must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.

(c) Standardized Periodic Monitoring Procedure:

(i) Conduct three test runs of at least 20 minutes duration within 10% of 100% peak (or the highest achievable) load.

(ii) Determine NOx and CO emissions and O2 concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522.

(iii) If the measured NOx or CO emissions concentrations are in excess of the emissions limitations specified in this permit, the permittee must perform a stack test within 180 days of the periodic monitoring.

(d) The 2,500 hours of operation count resets after any stack test performed.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The permittee shall continuously monitor the following parameters whenever Source ID P104 is in operation:

(a) hours of operation, utilizing a non-resettable hour meter,

(b) the combustion air and natural gas fuel flow rates, utilizing an air-to-fuel rate controller.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The EMIT Technologies RT-3615-H catalytic oxidizer, ID C104, shall be equipped with a catalyst bed temperature monitor/readout. Should the monitor detect a catalyst inlet temperature greater than or equal to 1,250 degrees F, a visual and/or audible alarm will be activated.

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

(a) The permittee shall maintain comprehensive, accurate records of the following:

(i) The emissions estimates and supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, particulate matter, sulfur oxide, and formaldehyde emission limitations for Source ID P104 in any 12 consecutive month period.

**SECTION D. Source Level Requirements**

- (ii) The hours of operation of Source ID P104 on monthly basis.
 (iii) The inlet gas temperature of the catalytic oxidizer (C104) on a continuous basis via a data acquisition system.
- (b) These records shall be maintained for a minimum of five years and made available to the Department upon request.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

The permittee shall maintain a copy of the maintenance plan and records of the maintenance conducted on Source ID P104.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR 60.4243(b)(2)(ii), the permittee shall operate Source ID P104 in a manner consistent with good air pollution control practice for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P104 is a 2,175 bhp Caterpillar G3516C, four stroke, ultra lean burn, natural gas-fired engine equipped with a Catalytic Combustion or equivalent catalytic oxidizer (ID C104) for the control of carbon monoxide and volatile organic compounds.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 Am I subject to this subpart?**

Source ID P104 is subject to the requirements of the Standards of Performance for Stationary Spark Ignition Internal combustion Engines pursuant to 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247.

**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]
 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
 Am I subject to this subpart?**

Source ID P104 is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines pursuant to 40 CFR Part 63 Subpart ZZZZ Section 63.6580 through 63.6675. In accordance with 40 CFR 63.6590(c)(1), Source ID P104 must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart JJJJ.

**SECTION D. Source Level Requirements**

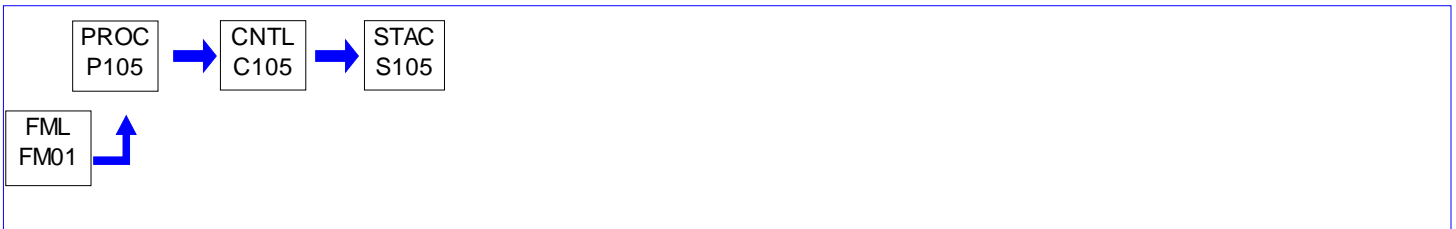
Source ID: P105

Source Name: 2175 BHP CATERPILLAR G3516C ENGINE #3

Source Capacity/Throughput:

N/A

Natural Gas

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 25 Pa. Code Section 123.41.]

The emission of visible air contaminants into the outdoor atmosphere from Source ID P105 shall not occur in such a manner that the opacity of the emission is either of the following:

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

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12. Compliance with this streamlined condition ensures compliance with the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ.]

The air contaminant emissions from Source ID P105 shall not exceed the following limitations:

- (a) nitrogen oxides (NO_x, expressed as NO₂) - 0.50 grams per brake horsepower-hour and 10.50 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) – 0.20 grams per brake horsepower-hour and 4.20 tons in any 12 consecutive month period,
- (c) volatile organic compounds (VOCs), excluding formaldehyde – 0.15 grams per brake horsepower-hour and 3.15 tons in any 12 consecutive month period,
- (d) sulfur oxides (SO_x, expressed as SO₂) – 0.000588 pounds per million Btu and 0.04 tons in any 12 consecutive month period,
- (e) particulate matter (PM/PM₁₀/PM_{2.5}) – 0.00999 pounds per million Btu and 0.74 tons in any 12 consecutive month period,
- (f) formaldehyde – 0.05 grams per brake horsepower-hour and 1.05 tons in any 12 consecutive month period.

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P105 shall be fired only on natural gas.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Compliance with this streamlined condition satisfies the subsequent performance testing requirements specified in 40 CFR 60.4243(b)(2)(ii).]

The permittee shall conduct performance testing on Source ID P105 every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate compliance with the NOx, CO and VOC emissions limitations specified in this permit.

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

(a) Every 2,500 hours of operation the permittee shall perform periodic monitoring for NOx and CO emissions to verify the continued compliance of Source ID P105.

(b) When conducting periodic monitoring on Source ID P105, the permittee may follow the procedures in (c) below. If the permittee decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the permittee must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.

(c) Standardized Periodic Monitoring Procedure:

(i) Conduct three test runs of at least 20 minutes duration within 10% of 100% peak (or the highest achievable) load.

(ii) Determine NOx and CO emissions and O2 concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522.

(iii) If the measured NOx or CO emissions concentrations are in excess of the emissions limitations specified in this permit, the permittee must perform a stack test within 180 days of the periodic monitoring.

(d) The 2,500 hours of operation count resets after any stack test performed.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The permittee shall continuously monitor the following parameters whenever Source ID P105 is in operation:

(a) hours of operation, utilizing a non-resettable hour meter,

(b) the combustion air and natural gas fuel flow rates, utilizing an air-to-fuel rate controller.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

The EMIT Technologies RT-3615-H catalytic oxidizer, ID C105, shall be equipped with a catalyst bed temperature monitor/readout. Should the monitor detect a catalyst inlet temperature greater than or equal to 1,250 degrees F, a visual and/or audible alarm will be activated.

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

(a) The permittee shall maintain comprehensive, accurate records of the following:

(i) The emissions estimates and supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, particulate matter, sulfur oxide, and formaldehyde emission limitations for Source ID P105 in any 12 consecutive month period.

**SECTION D. Source Level Requirements**

- (ii) The hours of operation of Source ID P105 on monthly basis.
 (iii) The inlet gas temperature of the catalytic oxidizer (C105) on a continuous basis via a data acquisition system.
- (b) These records shall be maintained for a minimum of five years and made available to the Department upon request.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

The permittee shall maintain a copy of the maintenance plan and records of the maintenance conducted on Source ID P105.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR 60.4243(b)(2)(ii), the permittee shall operate Source ID P105 in a manner consistent with good air pollution control practice for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

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

[Additional authority for this condition is derived from 25 Pa. Code Sections 127.1 and 127.12.]

Source ID P105 is a 2,175 bhp Caterpillar G3516C, four stroke, ultra lean burn, natural gas-fired engine equipped with a Catalytic Combustion or equivalent catalytic oxidizer (ID C105) for the control of carbon monoxide and volatile organic compounds.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 Am I subject to this subpart?**

Source ID P105 is subject to the requirements of the Standards of Performance for Stationary Spark Ignition Internal combustion Engines pursuant to 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247.

**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]
 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
 Am I subject to this subpart?**

Source ID P105 is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines pursuant to 40 CFR Part 63 Subpart ZZZZ Section 63.6580 through 63.6675. In accordance with 40 CFR 63.6590(c)(1), Source ID P105 must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart JJJJ.



SECTION D. Source Level Requirements

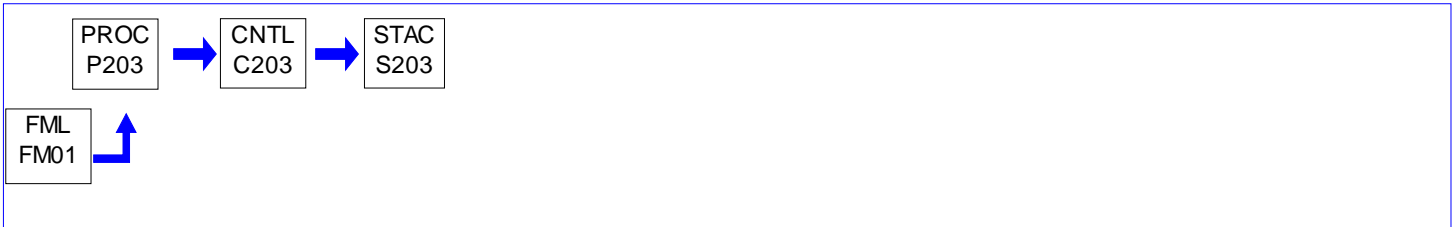
Source ID: P203

Source Name: 302 BHP DOOSAN D111TIC ENGINE

Source Capacity/Throughput:

N/A

Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR 60.4233(e), Source ID P203 shall meet the following emission limits:

- (a) Nitrogen Oxides: 1.0 grams/brake horsepower-hour and 82 ppmvd at 15% oxygen;
- (b) Carbon monoxide: 2.0 grams/brake horsepower-hour and 270 ppmvd at 15% oxygen;
- (c) Volatile organic compounds: 0.7 grams/brake horsepower-hour and 60 ppmvd at 15% oxygen.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

- (a) The permittee shall maintain comprehensive, accurate records of the emissions estimates and supporting calculations on a monthly basis used to verify compliance with the emissions limitations for Source ID P203.
- (b) These records shall be maintained for a minimum of five (5) years and made available to the Department upon request.

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

In accordance with 40 CFR 60.4243(b)(1), the permittee shall maintain maintenance records for Source ID P203 to verify compliance with the manufacturer's emission-related written instructions.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

The permittee shall maintain a certificate of conformity for Source ID P203 verifying compliance all applicable emission standards specified under 40 CFR 60.4233(e).

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

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

Source ID P203 is a 302 brake horsepower, natural gas-fired, Kohler 200 REZXB standby generator equipped with a Doosan D111TIC, 4-stroke, lean burn engine, equipped with a Kohler catalyst.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Am I subject to this subpart?**

Source ID P203 is subject to the requirements of the Standards of Performance for Stationary Spark Ignition Internal combustion Engines pursuant to 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247. The permittee shall comply with all applicable requirements of 40 CFR Part 60 Subpart JJJJ, Section 60.4230 through 60.4247.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

Source ID P203 is subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines pursuant to 40 CFR 63, Subpart ZZZZ, Sections 63.6580 through 63.6675. In accordance with 40 CFR 63.6590(c)(1), Source ID P203 must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ.



SECTION E. Source Group Restrictions.



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

(a) The following air contaminant sources are considered to be of a minor significance to the Department and have been determined to be exempt from permitting requirements. However, this determination does not exempt the sources from compliance with all applicable air quality regulations in 25 Pa. Code Chapters 121-145:

- (i) emissions from LNG boil-off, truck loading, upset conditions, startups, pressure relief valves and plant shutdowns, controlled by an Aereon DU-06x30' elevated flare (warm flare) and an Aereon DU-04x25' elevated flare (cold flare, as operated in the May 14, 2019 RFD approval);
- (ii) approximate 0.25 mile gravel-topped access road;
- (iii) two CATCO natural gas-fired catalytic heaters;
- (iv) one 200 gallon LNG storage tank;
- (v) three 60,992 gallon LNG storage tanks.

(b) The Towanda Facility also includes the following equipment which are not air contaminant sources:

- (i) one electric fire water pump;
- (ii) one electric regeneration heater;
- (iii) the facility's nitrogen refrigeration system.



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