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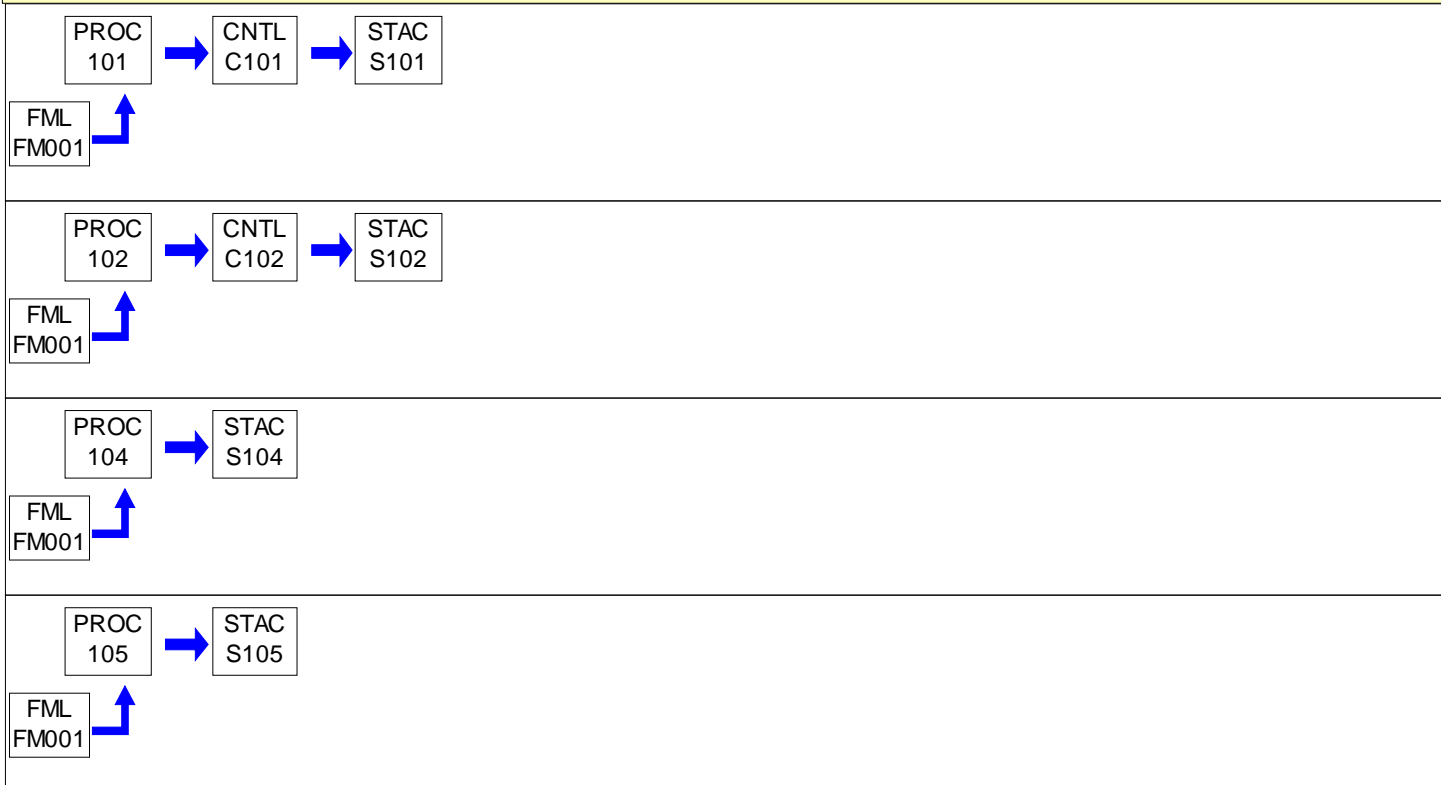
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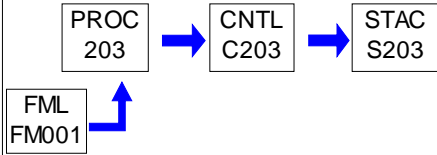
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	CATERPILLAR G3608 COMPRESSOR ENGINE #1 (2,370-BHP)	17.810 MMBTU/HR	
102	CATERPILLAR G3608 COMPRESSOR ENGINE #2 (2,370-BHP)		
104	SOLAR TAURUS 70 COMPRESSOR TURBINE #1 (10,280 HP)		
105	SOLAR TAURUS 70 COMPRESSOR TURBINE #2 (10,280 HP)		
203	EMERGENCY NATURAL GAS GENERATOR (803 BHP)		
C101	ENGINE #1 OXIDATION CATALYST		
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C203	EMERGENCY GENERATOR THREE-WAY CATALYSTS		
FM001	NATURAL GAS FUEL SUPPLY		
S101	ENGINE #1 STACK		
S102	ENGINE #2 STACK		
S104	TURBINE #1 STACK		
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S203	EMERGENCY GENERATOR STACK		

PERMIT MAPS



PERMIT MAPS



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

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

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

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

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]**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 and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (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 fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,

**SECTION B. General State Only Requirements**

modification, revision, renewal, and re-issuance of each operating permit or part thereof.

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

(1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.

(2) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

#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

**SECTION B. General State Only Requirements**

a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

- (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]**Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and

**SECTION B. General State Only Requirements**

significant operating permit modifications, under this permit, as outlined below:

(b) Administrative Amendments. The permittee shall make 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 make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#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:

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- (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 §121.7]****Prohibition of air pollution.**

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

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

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

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) - (8) N/A.

(9) Sources and classes of sources other than those identified in paragraphs (1)-(5), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

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

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

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

(c) Contained under WORK PRACTICE REQUIREMENTS in this section of the permit.

(d) N/A.

003 [25 Pa. Code §123.13]**Processes**

Particulate matter emissions into the outdoor atmosphere from any process shall not exceed 0.04 gr/dscf as specified in 25 Pa. Code § 123.13(c)(1)(i).

004 [25 Pa. Code §123.2]**Fugitive particulate matter**

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

**SECTION C. Site Level Requirements****# 005 [25 Pa. Code §123.31]****Limitations**

(a) N/A.

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

(c) N/A.

006 [25 Pa. Code §123.41]**Limitations**

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

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

(2) Equal to or greater than 60% at any time.

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

(a) In air basins. – N/A.

(b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.

(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.

(3) The emissions interfere with the reasonable enjoyment of life or property.

(4) The emissions cause damage to vegetation or property.

(5) The emissions are or may be deleterious to human or animal health

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

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(3) A fire set for the prevention and control of disease or pests, when approved by the Department.

(4) - (5) N/A.

(6) A fire set solely for recreational or ceremonial purposes.

(7) A fire set solely for cooking food.

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

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

**SECTION C. Site Level Requirements**

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

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

(2) N/A.

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b).

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

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

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

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

009 [25 Pa. Code §139.51]**Purpose.**

(a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing an emissions 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 § 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 25 Pa. Code § 139.53(a)(3), within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring indicating the completion date of the on-site testing.

(d) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f), and 40 CFR § 63.7(g), a 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 emission test program. For those tests being conducted pursuant to 40 CFR Part 61, the complete test report shall be submitted within 31 days after completion of the test

(e) 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 non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

**SECTION C. Site Level Requirements**

- (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.
- (f) 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.
- (g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (h) Pursuant to 25 Pa. Code § 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>. If internet submittal cannot be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 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.

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

A facility-wide inspection shall be conducted at a minimum of once each day that sources at the facility are operating and the facility is manned. The facility-wide inspection shall be conducted for the presence of the following:

1. Visible stack emissions;
2. Fugitive emissions; and
3. Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code § 123.1 or 25 Pa. Code § 123.2, and malodors prohibited under 25 Pa. Code § 123.31. Observations for visible stack emissions shall be conducted during daylight hours and all observations shall be conducted while sources are in operation. If any visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the Owner/Operator shall take corrective action. These observations determine whether, or not, these conditions exist. They do not quantify the level of existing conditions. Therefore, the observations for presence, or lack of, visible emissions do not require that they be performed by a person certified as a qualified observer for EPA Method 9 for Visual Determination of the Opacity of Emissions from Stationary Sources.

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

All logs and required records shall be maintained for a minimum of five years. These records must be kept on site, or made to be accessible from the site, for a minimum of two years. They may be stored at an alternative location acceptable to the Department, for the remaining time. All records shall be made available to the Department upon request.

012 [25 Pa. Code §135.5]**Recordkeeping**

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

**SECTION C. Site Level Requirements**

- (a) The number of hours per month that each turbine and engine operated.
- (b) The amount of fuel used per month by each turbine and engine.
- (c) Records including a description of testing methods, results, all turbine and engine operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each turbine and engine.
- (d) Copies of the report that demonstrates that the turbines were operating at rated maximum routine operating conditions and within plus or minus 25 percent of 100 percent peak load during performance testing.
- (e) Copies of the report that demonstrates that the engines were operating at rated maximum routine operating conditions and within plus or minus 10 percent of 100 percent peak (or highest achievable) load during performance testing.
- (f) Copies of the manufacturer's recommended maintenance schedule for each turbine and engine.
- (g) Records of any maintenance conducted on each turbine and engine.
- (h) The total sulfur content of the natural gas being fired in the turbines or the demonstration that the natural gas does not exceed potential sulfur emissions of 0.060 lb SO₂/MMBtu of heat input.
- (i) Records of a fractional natural gas analysis performed at least once every six months on the inlet natural gas to the facility, to include higher heating value.
- (j) Records of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.

V. REPORTING REQUIREMENTS.**# 013 [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

**SECTION C. Site Level Requirements**

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.

014 [25 Pa. Code §135.3]**Reporting**

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) - (c) N/A.

[The Department has required that the Owners/Operators of Buffalo Compressor Station submit an annual facility wide source reports.]

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 a source identified in 25 Pa. Code 123.1(a)(1)-(9) from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

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

All air contamination sources and air cleaning devices shall be operated and maintained in accordance with manufacturer's specification and good air pollution and engineering practices.

VII. ADDITIONAL REQUIREMENTS.**# 017 [25 Pa. Code §123.42]****Exceptions**

Limitations of opacity shall not apply to a visible emission in any of the following instances:

(1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.

**SECTION C. Site Level Requirements**

(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(3) When the emission results from sources specified in § 123.1 (a)(1)-(9) (relating to prohibition of certain fugitive emissions).

(4) N/A.

018 [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 devices approved by the Department.

019 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

Mass emissions may be determined using engineering calculations based on fuel and material purchase records, manufacturers specifications, AP-42 emission factors, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

020 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

Sources at this facility are subject to 40 CFR Part 60, Subpart A - General Provisions, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, and Subpart KKKK - Standards of Performance for Stationary Combustion Turbines.

Owner/operator shall comply with all applicable notification and reporting requirements contained in 40 CFR Part 60, Subparts A, JJJJ, and KKKK. In accordance with 40 CFR 60.4, copies of all requests, reports, applications, submittals and other communications shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted:

Director, Air, Toxics, and Radiation	PA Department of Environmental Protection
Environmental Protection Agency	Regional Air Quality Program Manager
Region III	400 Waterfront Drive
Office of Air Quality	Pittsburgh, PA 15222-4745
1650 Arch Street	
Philadelphia, PA 19103	

This permit contains language from the Code of Federal Regulations (CFR). Should the wording of the federal citations of the conditions in this permit be changed in the CFR, the new wording shall supersede the language of this permit.

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.

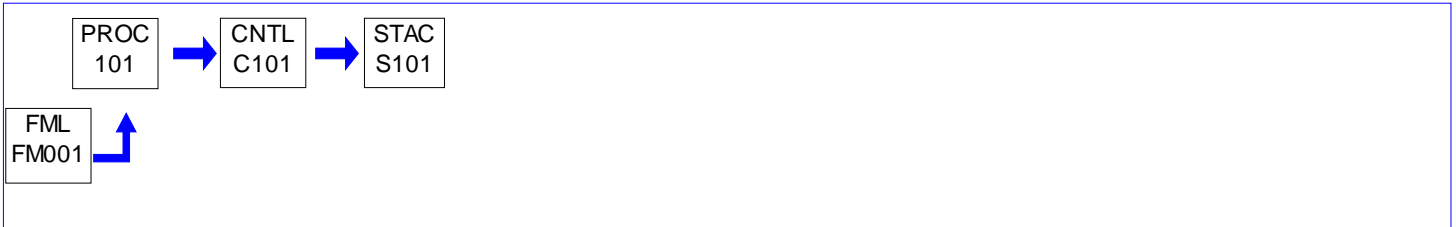
No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: CATERPILLAR G3608 COMPRESSOR ENGINE #1 (2,370-BHP)

Source Capacity/Throughput: 17.810 MMBTU/HR

Conditions for this source occur in the following groups: SG01
SG02**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: CATERPILLAR G3608 COMPRESSOR ENGINE #2 (2,370-BHP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SG01
SG02

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: SOLAR TAURUS 70 COMPRESSOR TURBINE #1 (10,280 HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SG03

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

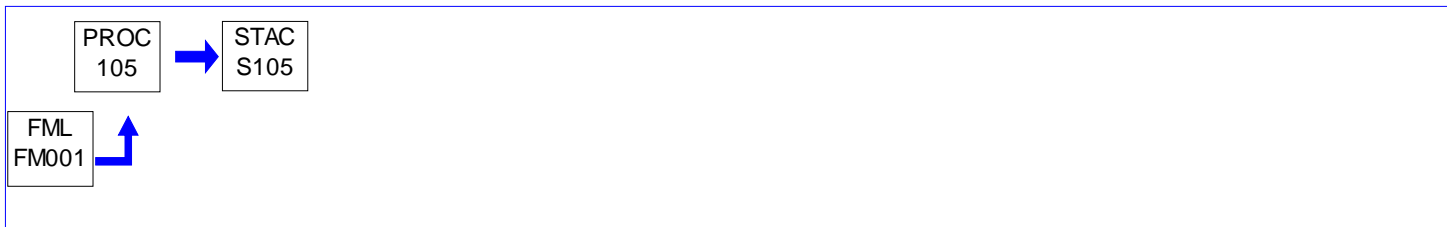
**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: SOLAR TAURUS 70 COMPRESSOR TURBINE #2 (10,280 HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SG03

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 203

Source Name: EMERGENCY NATURAL GAS GENERATOR (803 BHP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SG02

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

Visible emissions from the engine shall not exceed the following:

- (a) Equal to or greater than 10% opacity for a period or periods aggregating more than 3 minutes in any one hour.
- (b) Equal to or greater than 30% opacity at any time.

Operation Hours Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Operation of the emergency generator shall be limited to no greater than 500 hours during any consecutive 12-month period, updated monthly.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The Owner/Operator shall maintain a 12-month rolling record of the number of hours the emergency generator operates and shall install and operate a non-resettable hour meter.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level 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) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: SG01

Group Description: Reciprocating Compressor Engines

Sources included in this group

ID	Name
101	CATERPILLAR G3608 COMPRESSOR ENGINE #1 (2,370-BHP)
102	CATERPILLAR G3608 COMPRESSOR ENGINE #2 (2,370-BHP)

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

Emission rates for each Caterpillar G3608 engine shall be limited not to exceed the following:

NOx - 3.66 pounds/hour

CO - 1.57 pounds/hour

VOC - 2.19 pounds/hour

Formaldehyde (HCHO) - 0.63 pounds/hour

Total of all HAPs - 0.94 pounds/hour

[The NOx emission limit in this condition is based on 0.7 g/bhp-hr uncontrolled emissions & no control.

The CO emission limit in this condition is based on 3 g/bhp-hr uncontrolled emissions & 90% control.

The VOC emission limit in this condition is based on 0.7 g/bhp-hr uncontrolled emissions & 40% control.

The formaldehyde emission limit in this condition is based on 0.4 g/bhp-hr uncontrolled emissions & 70% control.

The emission limit for the sum of all HAPs combined, in this condition is based on 0.499 g/bhp-hr uncontrolled emissions & 70% control of HCHO & 40% control of all other HAPs.

These emission limits were established under BAT, in PA-63-00955A.]

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

Visible emissions from each engine shall not exceed the following:

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

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

[These opacity limits were established under BAT, in PA-63-00955A.]

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

The Owner/Operator shall perform NOx, CO, VOC, and formaldehyde emission tests upon each Caterpillar G3608 engine according to the requirements of 25 Pa. Code Chapter 139. At a minimum, testing shall be performed on a five year frequency basis, with no greater than 62-months between stack test programs. Each emission test shall be performed by methods approved by the Department.

**SECTION E. Source Group Restrictions.**

Stack testing for NO_x shall be conducted by EPA Test Method 7E, or Agency approved equivalent. Stack testing for CO shall be conducted by EPA Test Method 10, or Agency approved equivalent. Stack testing for formaldehyde shall be conducted by EPA Test Method 320, or Agency approved equivalent.

For purposes of demonstrating compliance with the VOC limits established herein, total hydrocarbons are as measured by Method 25A, or Agency approved equivalent, minus methane and ethane, as measured by Method 320, or Agency approved equivalent. All compounds shall be measured on an "as propane" basis.

In addition to the stack testing required by this condition, the permittee shall perform testing for NO_x and CO emissions upon each of the respective engines, using a portable analyzer and methods approved by the Department, on a minimum frequency of twice per year, with at least 120 days between tests. The Department may alter the frequency of annual portable analyzer tests based on the results.

The Department reserves the right to require stack tests in accordance with EPA reference methods should the test results from the portable analyzer warrant.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: SG02

Group Description: RICE Subject to 40 CFR Part 60, Subpart JJJJ

Sources included in this group

ID	Name
101	CATERPILLAR G3608 COMPRESSOR ENGINE #1 (2,370-BHP)
102	CATERPILLAR G3608 COMPRESSOR ENGINE #2 (2,370-BHP)
203	EMERGENCY NATURAL GAS GENERATOR (803 BHP)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

**# 001 [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?**

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) - (2) N/A.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) N/A; or

**SECTION E. Source Group Restrictions.**

(iv) On or after January 1, 2009, for emergency engines.

(4) - (6) N/A.

(b) - (f) N/A.

[The two natural gas-fired compressor engines, Caterpillar G3608 #1 & #2 (Source IDs 101 & 102) and the Emergency Generator Engine (Source ID 203) are subject to their applicable requirements of 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.]

**# 002 [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?**

(a) - (d) N/A.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) ... must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. ...

(f) - (h) N/A.

[Table 1 to Subpart JJJJ of Part 60 - NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines =100 HP (...) ... and Stationary Emergency Engines >25 HP states:

(For) Engine type and fuel: Non-Emergency SI Natural Gas ... Maximum engine power HP Greater Than, or Equal To, 500, Manufacture date 7/1/2010 (On, or after):

Emission standards (are:)

g/HP-hr		
NO _x	CO	VOC
1.0	2.0	0.7

(or)

ppmvd at 15% O ₂		
NO _x	CO	VOC
82	270	60

{Caterpillar Compressor Engines #1 & #2 (Source IDs 101 & 102) are in this class of engines and are subject to these requirements.}

And

(For) Emergency. Maximum engine power HP Greater Than, or Equal To, 130, Manufacture date 1/1/2009 (On, or after):

Emission standards (are:)

g/HP-hr		
NO _x	CO	VOC
2.0	4.0	1.0

(or)

**SECTION E. Source Group Restrictions.**

ppmvd at 15% O₂
 NO_x CO VOC
 160 540 86

{The Emergency Generator Engine (Source ID 203) is in this class of engines and is subject to these requirements.}

{Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.}]

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]
 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?**

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

**# 004 [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?**

(a) N/A.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) N/A.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) N/A.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) N/A.

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

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

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

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

(ii) N/A.

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

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) - (ii) N/A.

(e) - (f) N/A.

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) N/A.

[The Emergency Generator Engine (Source ID 203) is an emergency stationary ICE and has applicable requirements under Subsection (d) of this condition. Subsection (d) does not contain applicable requirements for Source IDs 101 & 102.

Caterpillar Compressor Engines (Source ID 101 & 102) are equipped with three-way catalysts and have applicable requirements under Subsection (g) of this condition. Subsection (g) does not contain applicable requirements for Source ID 203.]

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in

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the engine exhaust using Equation 1 of this section:

$$ER = (Cd * (1.912 * 10^{-3}) * Q * T)/HP\text{-hr} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO_x in g/HP-hr.

Cd = Measured NO_x concentration in parts per million by volume (ppmv).

1.912 * 10⁻³ = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = (Cd * (1.164 * 10^{-3}) * Q * T)/HP\text{-hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

Cd = Measured CO concentration in ppmv.

1.164 * 10⁻³ = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = (Cd * (1.833 * 10^{-3}) * Q * T)/HP\text{-hr} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

Cd = VOC concentration measured as propane in ppmv.

1.833 * 10⁻³ = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = CM_i/CA_i \quad (\text{Eq. 4})$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

CM_i = Measured concentration of compound i in ppmv as carbon.

CA_i = True concentration of compound i in ppmv as carbon.

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$$C_{icorr} = R_{Fi} * C_{imeas} \quad (\text{Eq. 5})$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 * C_{icorr} \quad (\text{Eq. 6})$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[Table 2 to Subpart JJJJ of Part 60 - Requirements for Performance Tests states:

{As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load}

For each 1. Stationary SI internal combustion engine demonstrating compliance, according to §60.4244, Complying with the requirement to:

a. limit the concentration of NO_x in the stationary SI internal combustion engine exhaust, You must:

i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine; Using (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate, According to the following requirements: (a) Alternatively, for NO_x, O₂, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.

ii. Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; Using (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005), According to the following requirements: (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for NO_x concentration.

iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust; Using (3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.

iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and Using (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (c) Measurements to determine moisture must be made at the same time as the measurement for NO_x concentration.

v. Measure NO_x at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device, Using (5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005), Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (d) Results of this test consist of the average of the three 1-hour or longer runs.

b. limit the concentration of CO in the stationary SI internal combustion engine exhaust, You must:

i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal

**SECTION E. Source Group Restrictions.**

combustion engine; Using (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate, According to the following requirements: (a) Alternatively, for CO, O₂, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.

ii. Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; Using (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005), According to the following requirements: (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for CO concentration.

iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust; Using (3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.

iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and Using (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.

v. Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device, Using (5) Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005), Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (d) Results of this test consist of the average of the three 1-hour or longer runs.

c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust, You must:

i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine; Using (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate, According to the following requirements: (a) Alternatively, for VOC, O₂, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.

ii. Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; Using (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005), According to the following requirements: (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for VOC concentration.

iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust; Using (3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.

iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and Using (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.

v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device, Using (5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a hydrocarbon cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03, According to the following requirements: (d) Results of this test consist of the average of the three 1-hour or longer runs.

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{You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O₂ content of the exhaust gas as an alternative to EPA Method 3B. AMSE PTC 19.10-1981 incorporated by reference, see 40 CFR 60.17

You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (<http://www.epa.gov/ttn/emc/prelim/otm11.pdf>).

You must meet the requirements in §60.4245(d).}]

**# 006 [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?**

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) N/A.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. ... The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.

(e) N/A.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What definitions apply to this subpart?**

**SECTION E. Source Group Restrictions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

...

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) - (3) N/A.

...

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

...

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

...

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

...

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

...

**SECTION E. Source Group Restrictions.**

Group Name: SG03

Group Description: Turbine Compressor Engines

Sources included in this group

ID	Name
104	SOLAR TAURUS 70 COMPRESSOR TURBINE #1 (10,280 HP)
105	SOLAR TAURUS 70 COMPRESSOR TURBINE #2 (10,280 HP)

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

Visible emissions from each Solar Taurus 70 turbine shall not exceed 10% opacity at any time.

[This condition was carried forward from PA-04-00086B.]

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

Emission rates for each Solar Taurus turbine shall be limited as follows:

Pollutant	Operating Condition	Emission Rate
Nitrogen Oxides	Normal	15 ppmv @ 15% O2 dgb
Nitrogen Oxides	Normal	5.09 lb/hr
Nitrogen Oxides	All	22.30 tpy
Carbon Monoxide	Normal	25 ppmv @ 15% O2 dgb
Carbon Monoxide	Normal	5.17 lb/hr
Carbon Monoxide	All	28.66 tpy
VOC	Normal	25 ppmv @ 15% O2 dgb
VOC	Normal	0.69 lb/hr
VOC	All	3.08 tpy

For purposes of this condition, the "normal" operating scenario excludes startup, shutdown, and low temperature operating scenarios. Startup is defined as beginning when air contaminants begin to be emitted to the ambient air, and shall have a duration no greater than 10 minutes. Shutdown is defined as ending when contaminants are no longer being emitted to the ambient air, and shall have a duration no greater than 10 minutes. Low temperature is defined as less than 0 Degrees F.

[This condition was carried forward from PA-04-00086B.]

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

The Owner/Operator shall perform NOx, CO, and VOC emission tests upon each Solar Taurus 70 turbine according to the requirements of 25 Pa. Code Chapter 139. Testing shall be performed no less often than once every two years. Each emission test shall be performed using EPA Method stack testing.

III. MONITORING REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.****IV. RECORDKEEPING REQUIREMENTS.**

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

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.**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****Does this subpart apply to my stationary combustion turbine?**

(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. ...

(b) N/A.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for nitrogen oxides (NOX)?**

(a) You must meet the emission limits for NOx specified in Table 1 to this subpart.

(b) N/A.

[Table 1 to Subpart KKKK of Part 60—Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines states:

(For a) Combustion turbine type: New turbine firing natural gas (of) Combustion turbine heat input at peak load (HHV) of > 50 MMBtu/h and < or = 850 MMBtu/h, (the) NOx emission standard (is):

25 ppm at 15 percent O2 or 150 ng/J of useful output (1.2 lb/MWh).

[Compliance with Condition #002 of this subsection will assure compliance with the emission limit in this condition.]

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4330]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for sulfur dioxide (SO2)?**

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

(1) N/A;

(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. ...

(3) N/A.

(b) N/A.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4333]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What are my general requirements for complying with this subpart?**

**SECTION E. Source Group Restrictions.**

(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(b) N/A.

008 [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?**

(a) ... If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, you must resume annual performance tests.

(b) N/A.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for units located in continental areas ...:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum ... total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet ...

(b) N/A.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What reports must I submit?**

(a) N/A.

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

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4395]**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****When must I submit my reports?**

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

012 [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 ?**

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

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

(i) Measure the NOx concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. ...:

(ii) Measure the NOx and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters) ... Use EPA Method 19 in appendix A of this part to calculate the NOx emission rate in lb/MMBtu. ...

(2) Sampling traverse points for NOx and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a

**SECTION E. Source Group Restrictions.**

traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

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

(i) You may perform a stratification test for NO_x and diluent pursuant to

(A) N/A, or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

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

(A) If each of the individual traverse point NO_x concentrations is within ± 10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ± 5 ppm or ± 0.5 percent CO₂ (or O₂) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_x concentration during the stratification test; or

(B) N/A; or

(C) For turbines with a NO_x standard less than or equal to 15 ppm @ 15% O₂, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ± 2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ± 1 ppm or ± 0.15 percent CO₂ (or O₂) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) - (3) N/A.

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

(5) N/A.

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

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4420]

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein will have the meaning given them in the Clean Air Act and in subpart A (General Provisions) of this part.

...

Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-

**SECTION E. Source Group Restrictions.**

derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

...

Peak load means 100 percent of the manufacturer's design capacity of the combustion turbine at ISO conditions.

...

Simple cycle combustion turbine means any stationary combustion turbine which does not recover heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine, or which does not recover heat from the combustion turbine exhaust gases for purposes other than enhancing the performance of the combustion turbine itself.

...



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.**

1. The capacities/throughputs and other information listed in Sections A, D, E, and this section, excluding those in permit restrictions, are for informational purposes only and are not enforceable limits.

2. The following description is for information purposes only:

This natural minor State Only Operating Permit (SOOP) authorizes National Fuel Gas Supply Corporation to operate a natural gas compressor station at their Buffalo Compressor Station, located in Buffalo Township, Washington County.

The facility primarily pressurizes natural gas along a transmission pipeline. It also contains ancillary processes.

3. Air contamination sources at the facility are as follows:

Caterpillar Compressor Engine #1 (G3608, NG, 2,370-Bhp).
Caterpillar Compressor Engine #2 (G3608, NG, 2,370-Bhp).
Solar Taurus Compressor Turbine #1 (Model 70, NG, 10,280-Bhp).
Solar Taurus Compressor Turbine #2 (Model 70, NG, 10,280-Bhp).
Emergency Generator Engine (Cummins GTA-38, NG, 803-bhp).

4. Air pollution control equipment at the facility are as follows

Oxidation Catalysts (G3608 Engines)
3-Way Catalyst (GTA-38 Engine)

5. Insignificant Sources at the facility are:

(1) 1,000 Gallon Glycol Storage Tank
(2) 500 Gallon Glycol Storage Tanks
(1) 1,000 Gallon Drip Fluids Storage Tank
(2) 500 Gallon Lube Oil Storage Tanks
(1) 3,000 Gallon Lube Oil Storage Tank
(1) 2.3 MMBtu/hr Pipeline Heater
(1) 0.0025 MMBtu/hr Catalytic Heater
(8) 0.072 MMBtu/hr Catalytic Heaters
(6) 0.05 MMBtu/hr Catalytic Heaters
Fugitive Emissions (May include, but is not limited to, piping component leaks, venting/blowdown emissions, turbine startup/shutdown emissions, pneumatic devices, and pigging operations)

On November 24, 2020, the date of issue of this renewed permit, it was amended to state that Mr. Jeffery J. Kittka, Vice President of the National Fuel Gas Supply Corporation, was named as an alternate Responsible Official for the Buffalo Compressor Station. On May 8, 2020, National Fuel Gas Supply Corporation submitted an application to request the addition of this alternate Responsible Official.

On December 22, 2020, this SOOP was amended to remove a requirement to maintain records of testing for sulfur concentration in the natural gas burned. This was not an applicable requirement, because the requirement to test natural gas for sulfur concentration had previously been removed from the permit.



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