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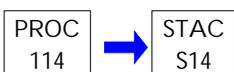
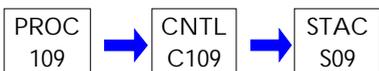
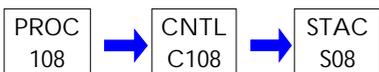
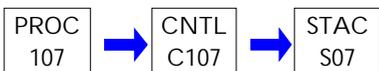
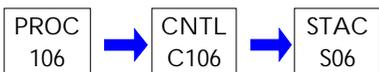
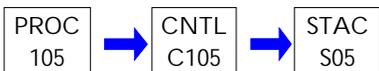
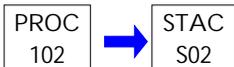


SECTION A. Site Inventory List

| Source ID | Source Name | Capacity/Throughput | Fuel/Material |
|-----------|---------------------------------|---------------------|---------------|
| 102 | GE TURBINE | 120.000 MCF/HR | Natural Gas |
| 104 | 1100 HP INGERSOLL RAND 1 | 17.500 MCF/HR | NATURAL GAS |
| 105 | 1100 HP INGERSOLL RAND 2 | 17.500 MCF/HR | NATURAL GAS |
| 106 | 1100 HP INGERSOLL RAND 3 | 17.500 MCF/HR | NATURAL GAS |
| 107 | 1100 HP INGERSOLL RAND 4 | 17.500 MCF/HR | NATURAL GAS |
| 108 | 1100 HP INGERSOLL RAND 5 | 17.500 MCF/HR | NATURAL GAS |
| 109 | 1100 HP INGERSOLL RAND 6 | 17.500 MCF/HR | NATURAL GAS |
| 110 | 2000 HP INGERSOLL RAND 1 | 30.000 MCF/HR | NATURAL GAS |
| 111 | 2000 HP INGERSOLL RAND 2 | 30.000 MCF/HR | NATURAL GAS |
| 112 | 2000 HP INGERSOLL RAND 3 | 30.000 MCF/HR | NATURAL GAS |
| 113 | 2000 HP INGERSOLL RAND 4 | 70.000 MCF/HR | NATURAL GAS |
| 114 | CAT-3412 EMERGENCY GENERATOR 1 | | |
| 115 | CAT-G-398 EMERGENCY GENERATOR 2 | | |
| 117 | AREA FUGITIVES | | |
| 118 | SOLAR MARS TURBINE (T-15000) | | |
| C104 | 1100 HP INGERSOLL RAND 1 | | |
| C105 | 1100 HP INGERSOLL RAND 2 | | |
| C106 | 1100 HP INGERSOLL RAND 3 | | |
| C107 | 1100 HP INGERSOLL RAND 4 | | |
| C108 | 1100 HP INGERSOLL RAND 5 | | |
| C109 | 1100 HP INGERSOLL RAND 6 | | |
| C110 | 2000 HP INGERSOLL RAND 1 | | |
| C111 | 2000 HP INGERSOLL RAND 2 | | |
| C112 | 2000 HP INGERSOLL RAND 3 | | |
| C113 | 2000 HP INGERSOLL RAND 4 | | |
| S02 | GE TURBINE | | |
| S04 | 1100 HP INGERSOLL RAND 1 | | |
| S05 | 1100 HP INGERSOLL RAND 2 | | |
| S06 | 1100 HP INGERSOLL RAND 3 | | |
| S07 | 1100 HP INGERSOLL RAND 4 | | |
| S08 | 1100 HP INGERSOLL RAND 5 | | |
| S09 | 1100 HP INGERSOLL RAND 6 | | |
| S10 | 2000 HP INGERSOLL RAND 1 | | |
| S11 | 2000 HP INGERSOLL RAND 2 | | |
| S12 | 2000 HP INGERSOLL RAND 3 | | |
| S13 | 2000 HP INGERSOLL RAND 4 | | |
| S14 | CAT-3412 EMERG GEN 1 | | |
| S15 | CAT-G-398 EMERG GEN 2 | | |

PERMIT MAPS

PERMIT MAPS





SECTION B. General Title V 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 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

#003 [25 Pa. Code § 127.446(a) and (c)]

Permit Expiration

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. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V 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. 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.

#004 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

Permit Renewal

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

(c) 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. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#005 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

(1) The Department determines that no other change in the permit is necessary;

(2) 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,



SECTION B. General Title V Requirements

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#006 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

Inspection and Entry

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

(1) Enter at reasonable times upon the permittee's premises where a Title V 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 or remove, at reasonable times, records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, 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, 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.

(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 §§ 127.25, 127.444, & 127.512(c)(1)]

Compliance Requirements

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) 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 to the source are 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 Title V 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.



SECTION B. General Title V Requirements

#008 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

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

#009 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#010 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#011 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.



SECTION B. General Title V Requirements

#012 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541.

#013 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

(a) The permittee may make minor operating permit modifications (as defined in 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(b) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to an operational flexibility change authorized by 25 Pa. Code § 127.462.

#014 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code § 127.450(a), according to procedures specified in § 127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.

(b) Upon taking final action granting a request for an administrative permit amendment in accordance with § 127.450(c), the Department will allow coverage under 25 Pa. Code § 127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa. Code Article III, unless precluded by the Clean Air Act or the regulations thereunder.

#015 [25 Pa. Code § 127.512(b)]

Severability Clause

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

#016 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

Fee Payment

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

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(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#017 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. 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.

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

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit 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 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 or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(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, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less

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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.

(d) 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 (b)(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 the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.

(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 allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical 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.

#018 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(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).

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#019 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#020 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

Submissions

(a) 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 on the permit transmittal letter,
or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Air Enforcement Branch (3AP12)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#021 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

Sampling, Testing and Monitoring Procedures

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#022 [25 Pa. Code §§ 127.511 & Chapter 135]

Recordkeeping Requirements

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



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(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 the 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. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#023 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #020(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#024 [25 Pa. Code § 127.513]

Compliance Certification

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This

SECTION B. General Title V Requirements

certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification should be postmarked or hand-delivered within thirty days of each anniversary date of the date of issuance or, of the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #020 of this section.

#025 [25 Pa. Code § 127.3]

Operational Flexibility

(a) The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (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)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

(b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa. Code § 127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

#026 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,

**SECTION B. General Title V Requirements**

(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

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

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

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

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #24 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#027 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#028 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

Permit Shield

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

SECTION B. General Title V Requirements

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department on minor or significant permit modifications, and operational flexibility changes shall be covered by the permit shield. Upon taking final action granting a request for an administrative permit amendment, the Department will allow coverage of the amendment by the permit shield in § 127.516 for administrative amendments which meet the relevant requirements of 25 Pa. Code Article III.

(d) The permit shield authorized under § 127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.

SECTION C. Site Level Requirements**I. RESTRICTIONS.****Emission Restriction(s).**

001 [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) 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) The permittee may not permit fugitive particulate matter from sources specified in paragraphs (a)(1)-(6) if the emissions pass outside the person's property.

002 [25 Pa. Code §123.31]

Limitations

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.

003 [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.

004 [25 Pa. Code §123.42]

Exceptions

The limitations of 123.41 (relating to limitations) 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.

(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).

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005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit 65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

006 [25 Pa. Code §129.14]

Open burning operations

(a) No person may permit the open burning of material in a manner that:

- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the owner/operator.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the owner/operator.
- (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.

(b)EXCEPTIONS: The requirements stated in 1-5 do not apply where the open burning operations result from:

- (1) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (2) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (3) A fire set solely for recreational or ceremonial purposes.
- (4) A fire set solely for cooking food.
- (5) 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.

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

- (1) As used in this applicable requirement the following terms shall have the following meanings:

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

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

- (2) notwithstanding clearing and grubbing wastes may be burned 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.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes that have been transported.

SECTION C. Site Level Requirements

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 1]
 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
 Table 1 a to Subpart ZZZZ of Part 63.--Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB St
 As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

| For each ... | You must meet one of the following emission limitations ... |
|-------------------|---|
| 1. 4SRB RICE..... | a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007, or b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ . |

As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE:

Table 1b to Subpart ZZZZ of Part 63.--
 Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

| For each ... | You must meet the following emission limitation... |
|---|--|
| 1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and using NSCR. | a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 ° F and less than or equal to 1250 ° F. |
| 2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent if applicable) and not using NSCR; | Comply with any operating limitations approved by the Administrator. |

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or
 4SRB stationary RICE complying
 with the re-quirement to limit
 the con-centration of formaldehyde
 in the stationary RICE exhaust to
 350 ppbvd or less at 15 percent
 O2 and not using NSCR.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 2]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Table 2a to Subpart ZZZZ of Part 63.-- Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

| For each ... | You must meet the following emission limitation ... |
|------------------------------|---|
| 1. 2SLB stationary RICE..... | a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O2 until June 15, 2007. |
| 2. 4SLB stationary RICE..... | a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O2. |
| 3. CI stationary RICE..... | a. Reduce CO emissions by 70 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O2. |

As stated in §§63.6600, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE:

Table 2b to Subpart ZZZZ of Part 63.--



SECTION C. Site Level Requirements

Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

| For each ... | You must meet the following operating limitation ... |
|--|--|
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst. | a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 ° F and less than or or equal to 1350 ° F. |
| 2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4 SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst. | Comply with any operating limitations approved by the Administrator. |

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

II. TESTING REQUIREMENTS.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 3]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Table 3 to Subpart ZZZZ of Part 63.-- Subsequent Performance Tests

| For each ... | Complying with the requirement to ... | You must ... |
|--|---|--|
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE. | Reduce CO emissions and not using a CEMS..... | Conduct subsequent performance tests semiannually. 1 |
| 2. 4SRB stationary RICE with a brake horsepower greater | Reduce formaldehyde emissions..... | Conduct subsequent performance tests semiannually. 1 |

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than or equal to 5,000.

| | | |
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| 3. Stationary RICE (all stationary RICE subcategories and all brake horsepower ratings). | Limit the concentration of formaldehyde in the stationary RICE exhaust. | Conduct subsequent performance tests semiannually. 1 |
|--|---|--|

1. After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 4]
 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
 Table 4 to Subpart ZZZZ of Part 63.-- Requirements for Performance Tests

| For each... | Complying with the requirement to ... | You must... | Using... | According to the following requirements... |
|--|---------------------------------------|--|---|--|
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emissions. | i. Measure the O ₂ at the inlet and outlet of the control device; and | (1) Portable CO and O ₂ analyzer | (a) Using ASTM D6522-00 1 (incorporated by reference, see §63.14 Measurements to determine O ₂ must be made at the same time as the measurements for CO concentration |
| | | ii. Measure the CO at the inlet and the outlet of the control device. | (1) Portable CO and O ₂ analyzer. | (a) Using ASTM D6522-00 1 (incorporated by reference, see §63.14). The CO concentration must be at 15 percent O ₂ , dry basis. |
| 2. 4SRB stationary RICE... | a. Reduce formaldehyde emissions. | i. Select sampling port location and the number of traverse points; and | (1) Method 1 or 1A of 40 CFR part 60 appendix A §63.7(d)(1)(i). | (a) Sampling sites must be located at the inlet and outlet of the control device. |
| | | ii. Measure O ₂ at the inlet and outlet of | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A. | (a) Measurements to determine O ₂ |

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| | | the control device; and | | concentration must be made at the same time as the measurements for formaldehyde concentration. |
| | | iii. Measure moisture content at the inlet and outlet of the control device; and | (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. | (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration. |
| | | iv. Measure formaldehyde at the inlet and the outlet of the control device | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 2, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130. | (a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| 3. Stationary RICE..... | a. Limit the concentration of formaldehyde in the stationary RICE exhaust. | i. Select the sampling port location and the number of traverse points; and | (1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i). | (a) If using a control device, the sampling site must be located at the outlet of the control device. |
| | | ii. Determine the O ₂ con- | (1) Method 3 or 3A or 3B of 40 CFR part 60, | (a) Measurements to determine O |

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|---|--|---|---|---|
| | | centration of the stationary RICE exhaust at the sampling port location; and | appendix A. | 2 con- centration must be made at the same time and location as the mea- surements for formaldehyde con- centration. |
| | | iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and | (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. | (a) Measure- ments to de- termine moisture content must be made at the same time and location as the measure- ments for formaldehyde con- centration. |
| | | iv. Measure formaldehyde at the exhaust of the stationary RICE. | (1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 2, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130. | (a) Formalde- hyde con- centration must be at 15 percent O2 , dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
| <p>1You may also use Methods 3A and 10 as options to ASTM-D6522-00. You may obtain a copy of ASTM-D6522-00 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.</p> <p>2You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.</p> | | | | |

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011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 5]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Table 5 to Subpart ZZZZ of Part 63.-- Initial Compliance With Emission Limitations and Operating Limitations

As stated in §§63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

| For each ... | Complying with the requirement to ... | You have demonstrated initial compliance if ... |
|--|---|---|
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emission and using oxidation catalyst, and using a CPMS. | i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 2. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emissions and not using oxidation catalyst. | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 3. 2SLB and 4SLB stationary RICE and CI stationary | a. Reduce CO emissions, and using a CEMS. | i. You have installed a CEMS to continuously monitor CO and either |

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| RICE. | | <p>O2 or CO2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and</p> <p>ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and</p> <p>iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.</p> |
| 4. 4SRB stationary RICE... | a. Reduce formaldehyde emissions and using NSCR. | <p>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and</p> <p>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</p> <p>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p> |
| 5. 4SRB stationary | a. Reduce formaldehyde | i. The average reduction |

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| RICE... | emissions and not using NSCR. | <ul style="list-style-type: none"> of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 6. Stationary RICE... | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR. | <ul style="list-style-type: none"> i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 7. Stationary RICE... | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR. | <ul style="list-style-type: none"> i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to |

SECTION C. Site Level Requirements

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| | | <ul style="list-style-type: none"> the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| <p># 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6] Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations</p> | | |
| For each ... | Complying with the requirement to ... | You have demonstrated initial compliance if ... |
| 1. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS. | <ul style="list-style-type: none"> i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved¹; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and dem- onstrating that the pressure drop across the catalyst is within the operating |

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|--|---|--|
| 2. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS. | <p>limitation established during the performance test.</p> <p>i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved¹; and</p> <p>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</p> <p>iii. Reducing these data to 4-hour rolling averages; and</p> <p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p> |
| 3. 2SLB and 4SLB stationary RICE and CI stationary RICE. | a. Reduce CO emissions and using a CEMS. | <p>i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and</p> <p>ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and</p> <p>iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.</p> |

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| 4. 4SRB stationary RICE... | a. Reduce formaldehyde emissions and using NSCR. | i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |
| 5. 4SRB stationary RICE... | a. Reduce formaldehyde emissions and not using NSCR. | i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. reducing these data to 4-hour rolling averages; iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. |
| 6. 4SRB stationary RICE with a brake horsepower greater than or equal to 5,000. | Reduce formaldehyde emissions..... | Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved. |
| 7. Stationary RICE... | Limit the concentration of formaldehyde in the stationary RICE exhaust and using | i. Conducting semiannual performance tests for formaldehyde to demonstrate that your |



SECTION C. Site Level Requirements

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| | oxidation catalyst or NSCR. | emissions remain at or below the formaldehyde concentration limit ¹ ; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. |
| 8. Stationary RICE... | Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR. | i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ¹ ; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the |

SECTION C. Site Level Requirements

| performance test.

1. After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

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

IV. RECORDKEEPING REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records in accordance with the recordkeeping requirements of 25 PA Code Section 129.95. As established in RACT Permit #65-000-839, Condition #25, the following records shall be kept for a source: operating hours, daily fuel consumption, operating pressures, and operating temperatures. These records shall be maintained on file for not less than two years and shall be made available to the Department upon request.

015 [25 Pa. Code §135.5]

Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

V. REPORTING REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall report to the Department each malfunction that occurs at the Title V facility. As defined in 40 CFR §60.2 and incorporated by reference in 25 PA Code Chapter 122, a malfunction means 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. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety or potential harm to the environment, the notification shall be submitted to the Department no later than one hour after the incident.
- (c) Unless otherwise required by specific reporting requirements, any malfunction that is not subject to the notice requirements of subsection (b) of this permit condition shall be reported to the Department within 24 hours (or the next business day) of discovery of the malfunction.

(1) The permittee shall notify the Regional Air Program Manager within 24 hours (or the next business day) of becoming aware of the occurrence of excess emissions which last for more than 4 hours and which result from a

SECTION C. Site Level Requirements

malfunction, a breakdown of process or control equipment or any abnormal condition.

The notice shall describe the:

- (i) name and location of the facility;
- (ii) nature and cause of the malfunction or breakdown;
- (iii) time when the malfunction or breakdown was first observed;
- (iv) expected duration of excess emissions; and
- (v) estimated rate of emissions.

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

(3) Subsequent to the malfunction, the permittee shall submit a full report on the malfunction to the Department within 15 days, if requested.

(4) The permittee shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.

017 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

(c) With respect to reporting, the permit shall incorporate the applicable reporting requirements and require the following:

(1) Submittal of reports of required monitoring at least every 6 months. Instances of deviations from permit requirements shall be clearly identified in the reports, Required reports shall be certified by a responsible official.

(2) Reporting of deviations from permit requirements within the time required by the terms and conditions of the permit including those attributable to upset conditions as defined in the permit, the probable cause of the deviations and corrective actions or preventive measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source.

018 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The Owner/operator shall submit the semi-annual monitoring reports for this facility by January 31 and July 31 of each year. The January 31 semi-annual monitoring report shall cover the period from July 1 through December 31. This semi-annual monitoring report may be included in January 31 Title V Compliance Certification required by title 25 PA Code 127.513. The July 31 semi-annual monitoring report shall cover the period from January 1 through June 30. However, in accordance with title 25 PA Code 127.511(c), in no case shall the semi-annual monitoring report be submitted less often than every six (6) months. This may require that an interim semi-annual monitoring report (covering a period less than six (6) months) be submitted to bring the facility into compliance with this schedule.

019 [25 Pa. Code §127.513]

Compliance certification.

Title V permits shall contain the following elements with respect to compliance:

SECTION C. Site Level Requirements

(5) Requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards or work practices. Permits shall include the following:

(i) The frequency, not less than annually or more frequent periods as specified in the applicable requirement or by the Department, of submissions of compliance certifications.

(ii) A means of monitoring the compliance of the source with its emissions limitations, standards and work practices, consistent with the requirements of this article.

(iii) A requirement that the compliance certification include the following:

(A) The identification of each term or condition of the permit that is the basis of the certification.

(B) The compliance status.

(C) The methods used for determining the compliance status of the source, currently and over the reporting period.

(D) Whether compliance was continuous or intermittent.

(E) Other facts the Department may require to determine the compliance status of the source.

(iv) A requirement that compliance certifications be submitted to the Administrator of the EPA, as well as to the Department.

(v) Additional requirements as may be specified under sections 114(a)(3) and 504(b) of the Clean Air Act (42 U.S.C.A. 7414(a)(3) and 7661(c).

(6) Other provisions the Department may require.

020 [25 Pa. Code §127.513]

Compliance certification.

The owner/operator shall submit a Title V Compliance Certification for this facility by January 31 of each year. The Title V Compliance Certification shall cover the previous calendar year, for the period January 1 through December 31. However, in accordance with Title 25 PA Code 127.513(5)(i), in no case shall the Title V Compliance Certification be submitted less often than annually. This may require that an interim Title V Compliance Certification (covering a period less than one year) be submitted to bring the facility into compliance with this schedule.

021 [25 Pa. Code §135.21]

Emission statements

(a) The owner or operator shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

(b) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

SECTION C. Site Level Requirements

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| | <p>deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or</p> <p>c. If you had a startup, shutdown or malfunction during the reporting period, the information in §63.10(d)(5)(i).</p> | <p>according to the requirements in §63.6650(b).</p> <p>i. Semiannually according to the requirements in §63.6650(b).</p> |
| 2. An immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period. | <p>a. Actions taken for the event; and</p> <p>b. The information in §63.10(d)(5)(ii).</p> | <p>i. By fax or telephone within 2 working days after starting actions inconsistent with the plan.</p> <p>i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(ii))</p> |
| 3. Report..... | <p>a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10</p> | <p>i. Annually, according to the requirements in §63.6650.</p> |

SECTION C. Site Level Requirements

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| | percent or more of the gross heat input on an annual basis; and | |
| b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and | | i. See item 3.a.i. |
| c. Any problems or errors suspected with the meters. | | i. See item 3.a.i. |

VI. WORK PRACTICE REQUIREMENTS.

024 [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(a)(1)-(6) from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.[25 PA Code 123.1 and 123.2]

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall conduct a daily inspection during regular business workdays around the plant periphery during daylight hours when the plant is in production to detect visible emissions, fugitive visible emissions, and malodorous emissions as follows:

- (a) Visible emissions in excess of the limits stated above. Visible emissions may be measured according to the methods specified in Section C, Condition #007, or alternatively, plant personnel who observe such emissions may report the incident of visible emissions to the Department within four hours of each incident and make arrangements for a certified observer to verify the visible emissions.
- (b) The presence of fugitive emissions visible beyond the plant boundaries as stated in section C, Condition #003.
- (c) The presence of malodorous emissions beyond the plant boundaries as stated in Section C, Condition #002.

If the facility becomes unmanned during the term of this permit, the company shall notify the Department and the monitoring shall be conducted once a month effective from the date the facility becomes unmanned.



SECTION C. Site Level Requirements

VII. ADDITIONAL REQUIREMENTS.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 8]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Table 8 to Subpart ZZZZ of Part 63.-- Applicability of General Provisions to Subpart ZZZZ

As stated in §63.6665, you must comply with the following applicable general provisions:

| General provisions citation | Subject of citation | Applies to subpart | Explanation |
|-----------------------------|--|--------------------|---------------------------------------|
| §63.1..... | General applicability of the General Provisions. | Yes. | |
| §63.2..... | Definitions..... | Yes..... | Additional terms defined in §63.6675. |
| §63.3..... | Units and abbreviations..... | Yes. | |
| §63.4..... | Prohibited activities and circumvention..... | Yes. | |
| §63.5..... | Construction and reconstruction..... | Yes. | |
| §63.6(a)..... | Applicability..... | Yes. | |
| §63.6(b)(1)-(4)..... | Compliance dates for new and reconstructed sources. | Yes. | |
| §63.6(b)(5)..... | Notification..... | Yes. | |
| §63.6(b)(6)..... | [Reserved]. | | |
| §63.6(b)(7)..... | Compliance dates for new and reconstructed area sources that become major sources. | Yes. | |
| §63.6(c)(1)-(2)..... | Compliance dates for existing sources..... | Yes. | |
| §63.6(c)(3)-(4)..... | [Reserved]. | | |
| §63.6(c)(5)..... | Compliance dates for existing area sources that become major sources. | Yes. | |
| §63.6(d)..... | [Reserved]. | | |
| §63.6(e)(1)..... | Operation and maintenance..... | Yes. | |
| §63.6(e)(2)..... | [Reserved]. | | |
| §63.6(e)(3)..... | Startup, shutdown, and malfunction plan..... | Yes. | |



SECTION C. Site Level Requirements

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| §63.6(f)(1)..... | Applicability of standards except during startup shutdown malfunction (SSM). | Yes. | |
| §63.6(f)(2)..... | Methods for determining compliance..... | Yes. | |
| §63.6(f)(3)..... | Finding of compliance..... | Yes. | |
| §63.6(g)(1)-(3).... | Use of alternate standard..... | Yes. | |
| §63.6(h)..... | Opacity and visible emission standards..... | No | Subpart ZZZZ does not contain opacity or visible emission standards. |
| §63.6(i)..... | Compliance extension procedures and criteria. | Yes. | |
| §63.6(j)..... | Presidential compliance exemption..... | Yes. | |
| §63.7(a)(1)-(2).... | Performance test dates..... | Yes..... | Subpart ZZZZ contains performance test dates at §63.6610. |
| §63.7(a)(3)..... | CAA section 114 authority..... | Yes. | |
| §63.7(b)(1)..... | Notification of performance test.... | Yes. | |
| §63.7(b)(2)..... | Notification of rescheduling..... | Yes. | |
| §63.7(c)..... | Quality assurance/test plan..... | Yes. | |
| §63.7(d)..... | Testing facilities..... | Yes. | |
| §63.7(e)(1)..... | Conditions for conducting performance tests. | Yes. | |
| §63.7(e)(2)..... | Conduct of performance tests and reduction of data. | Yes..... | Subpart ZZZZ specifies test methods at §63.6620. |
| §63.7(e)(3)..... | Test run duration... | Yes. | |
| §63.7(e)(4)..... | Administrator may require other testing under section 114 of the CAA. | Yes. | |
| §63.7(f)..... | Alternative test method provisions... | Yes. | |

SECTION C. Site Level Requirements

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| §63.7(g)..... | Performance test data analysis, recordkeeping, and reporting. | Yes. | |
| §63.7(h)..... | Waiver of tests..... | Yes. | |
| §63.8(a)(1)..... | Applicability of monitoring requirements..... | Yes..... | Subpart ZZZZ contains specific requirements for monitoring at §63.6625. |
| §63.8(a)(2)..... | Performance specifications..... | Yes. | |
| §63.8(a)(3)..... | [Reserved]..... | | |
| §63.8(a)(4)..... | Monitoring for control devices..... | No. | |
| §63.8(b)(1)..... | Monitoring..... | Yes. | |
| §63.8(b)(2)-(3).... | Multiple effluents and multiple monitoring systems. | Yes. | |
| §63.8(c)(1)..... | Monitoring system operation and maintenance. | Yes. | |
| §63.8(c)(1)(i)..... | Routine and predictable SSM..... | Yes. | |
| §63.8(c)(1)(ii)..... | SSM not in Startup Shutdown Malfunction Plan. | Yes. | |
| §63.8(c)(1)(iii).... | Compliance with operation and maintenance requirements. | Yes. | |
| §63.8(c)(2)-(3).... | Monitoring system installation..... | Yes. | |
| §63.8(c)(4)..... | Continuous monitoring system (CMS) requirements. | Yes..... | Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS). |
| §63.8(c)(5)..... | COMS minimum procedures..... | No | Subpart ZZZZ does not require COMS. |
| §63.8(c)(6)-(8).... | CMS requirements... | Yes..... | Except that subpart ZZZZ does not require COMS. |
| §63.8(d)..... | CMS quality control..... | Yes. | |
| §63.8(e)..... | CMS performance evaluation..... | Yes..... | Except for §63.8(e)(5)(ii), which applies to COMS. |
| §63.8(f)(1)-(5).... | Alternative monitoring method... | Yes. | |

SECTION C. Site Level Requirements

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| §63.8(f)(6)..... | Alternative to relative accuracy test..... | Yes. | |
| §63.8(g)..... | Data reduction..... | Yes..... | Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640. |
| §63.9(a)..... | Applicability and State delegation of notification requirements. | Yes. | |
| §63.9(b)(1)-(5).... | Initial notifications..... | Yes..... | Except that §63.9(b)(3) is reserved. |
| §63.9(c)..... | Request for compliance extension..... | Yes. | |
| §63.9(d)..... | Notification of special compliance requirements for new sources. | Yes. | |
| §63.9(e)..... | Notification of performance test.... | Yes. | |
| §63.9(f)..... | Notification of visible emission (VE)/opacity test. | No | Subpart ZZZZ does not contain opacity or VE standards. |
| §63.9(g)(1)..... | Notification of performance evaluation..... | Yes. | |
| §63.9(g)(2)..... | Notification of use of COMS data..... | No | Subpart ZZZZ does not contain opacity or VE standards. |
| §63.9(g)(3)..... | Notification that alternative to RATA is exceeded. | Yes..... | If alternative is in use. |
| §63.9(h)(1)-(6).... | Notification of compliance status... | Yes..... | Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved. |



SECTION C. Site Level Requirements

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| \$63.9(i)..... | Adjustment of submittal deadlines..... | Yes. | |
| \$63.9(j)..... | Change in previous information..... | Yes. | |
| \$63.10(a)..... | Administrative provisions for record- keeping/reporting. | Yes. | |
| \$63.10(b)(1)..... | Record retention.... | Yes. | |
| \$63.10(b)(2)(i)- (v)..... | Records related to SSM | Yes. | |
| \$63.10(b)(2)(vi)- (xi)..... | Records..... | Yes. | |
| \$63.10(b)(2)(xii)... | Record when under waiver..... | Yes. | |
| \$63.10(b)(2)(xiii)... | Records when using alternative to RATA..... | Yes..... | For CO standard if using RATA alternative. |
| \$63.10(b)(2)(xiv)... | Records of supporting documentation.... | Yes. | |
| \$63.10(b)(3)..... | Records of applicability determination.... | Yes. | |
| \$63.10(c)..... | Additional records for sources using CEMS. | Yes..... | Except that §63.10(c)(2)- (4) and (9) are re- served. |
| \$63.10(d)(1)..... | General reporting requirements..... | Yes. | |
| \$63.10(d)(2)..... | Report of performance test results..... | Yes. | |
| \$63.10(d)(3)..... | Reporting opacity or VE observations.... | No | Subpart ZZZZ does not contain opacity or VE standards. |
| \$63.10(d)(4)..... | Progress reports.... | Yes. | |
| \$63.10(d)(5)..... | Startup, shutdown, and malfunction reports. | Yes. | |
| \$63.10(e)(1) and (2)(i)..... | Additional CMS reports..... | Yes. | |
| \$63.10(e)(2)(ii).... | COMS-related report..... | No | Subpart ZZZZ does not require COMS. |
| \$63.10(e)(3)..... | Excess emission and parameter ex- ceedances reports. | Yes..... | Except that §63.10(e)(3)(i)(C) is reserved. |
| \$63.10(e)(4)..... | Reporting COMS data..... | No | Subpart ZZZZ does not require COMS. |
| \$63.10(f)..... | Waiver for recordkeep- | Yes. | |



SECTION C. Site Level Requirements

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| | ing/reporting..... | | |
| \$63.11..... | Flares..... | No. | |
| \$63.12..... | State authority and delegations..... | Yes. | |
| \$63.13..... | Addresses..... | Yes. | |
| \$63.14..... | Incorporation by reference..... | Yes. | |
| \$63.15..... | Availability of information..... | Yes. | |

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

*** Permit Shield In Effect ***

SECTION D. Source Level Requirements

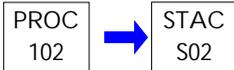
Source ID: 102

Source Name: GE TURBINE

Source Capacity/Throughput:

120.000 MCF/HR

Natural Gas

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #6, the emission rates of the GE MS 5001 turbine shall be limited as follows:

- 440 Tons/Year of Nitrogen Oxides (@ 15% O₂)
- 230 ppmvd of Nitrogen Oxides (@ 15% O₂)
- 1 Tons/Year of Non-Methane Volatile Organic Compounds
- 25 ppmvd of Non-Methane Volatile Organic Compounds

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.333]

Subpart GG - Standards of Performance for Stationary Gas Turbines**Standard for sulfur dioxide.**

The permittee shall comply with one or the other of the following conditions:

- (a) The permittee shall not discharge into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.

SECTION D. Source Level Requirements

(b) The permittee shall not burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

II. TESTING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

(a) Readings are corrected to 3% oxygen (15.1% in excess air)

(b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]

Subpart GG - Standards of Performance for Stationary Gas Turbines

Monitoring of operations.

In accordance with 40 CFR 60.334(h), the permittee:

- (1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (3) below. The sulfur content of the fuel must be determined using total sulfur methods described in 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86, which measure the major sulfur compounds may be used: and
- (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in 60.332). The nitrogen content of the fuel shall be determined using methods described in 60.335(b)(9) or an approved alternative.
- (3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner/or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
 - (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
 - (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 104

Source Name: 1100 HP INGERSOLL RAND 1

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

[Monitoring and related recordkeeping and reporting requirements.](#)

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NO_x) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NO_x RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O₂ engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.

2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.

2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.

2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.

2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.

2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.

2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.

2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.

2.5.1.2 Pressure differential across catalyst bed: Measure continuously

2.5.1.3 Exhaust O₂ concentration: Measure continuously

2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit

2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)

2.5.2.3 Exhaust O₂ concentration: Percent O₂

2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.

SECTION D. Source Level Requirements

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 105

Source Name: 1100 HP INGERSOLL RAND 2

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

[Monitoring and related recordkeeping and reporting requirements.](#)

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NO_x) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NO_x RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O₂ engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

- 2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.
- 2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.
- 2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.
- 2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.
- 2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

- 2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.
- 2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.
- 2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.
- 2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

- 2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.
- 2.5.1.2 Pressure differential across catalyst bed: Measure continuously
- 2.5.1.3 Exhaust O₂ concentration: Measure continuously
- 2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

- 2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit
- 2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)
- 2.5.2.3 Exhaust O₂ concentration: Percent O₂
- 2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.

**SECTION D. Source Level Requirements**

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 106

Source Name: 1100 HP INGERSOLL RAND 3

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

[Monitoring and related recordkeeping and reporting requirements.](#)

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NO_x) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NO_x RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O₂ engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.

2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.

2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.

2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.

2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.

2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.

2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.

2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.

2.5.1.2 Pressure differential across catalyst bed: Measure continuously

2.5.1.3 Exhaust O₂ concentration: Measure continuously

2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit

2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)

2.5.2.3 Exhaust O₂ concentration: Percent O₂

2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.



SECTION D. Source Level Requirements

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 107

Source Name: 1100 HP INGERSOLL RAND 4

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NO_x) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NO_x RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O₂ engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.

2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.

2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.

2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.

2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.

2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.

2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.

2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.

2.5.1.2 Pressure differential across catalyst bed: Measure continuously

2.5.1.3 Exhaust O₂ concentration: Measure continuously

2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit

2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)

2.5.2.3 Exhaust O₂ concentration: Percent O₂

2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.



SECTION D. Source Level Requirements

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 108

Source Name: 1100 HP INGERSOLL RAND 5

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

[Monitoring and related recordkeeping and reporting requirements.](#)

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NO_x) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NO_x RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O₂ engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.

2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.

2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.

2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.

2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.

2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.

2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.

2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.

2.5.1.2 Pressure differential across catalyst bed: Measure continuously

2.5.1.3 Exhaust O₂ concentration: Measure continuously

2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit

2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)

2.5.2.3 Exhaust O₂ concentration: Percent O₂

2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.

SECTION D. Source Level Requirements

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 109

Source Name: 1100 HP INGERSOLL RAND 6

Source Capacity/Throughput:

17.500 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #8, the emission rates of each Ingersoll Rand KVG 410 engine shall be limited as follows:

- 22 Tons/Year of Nitrogen Oxides
- 5 Lbs/Hour of Nitrogen Oxides
- 1.3 Tons/Year of Non-Methane Volatile Organic Compounds
- 0.5 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NOx * 0.001208 * mmbtu/hr = lbs/hr NOx

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NOx (as NO2), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NOx (as NO2), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NOx (as NO2), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

012 [25 Pa. Code §127.511]

[Monitoring and related recordkeeping and reporting requirements.](#)

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate compliance with emission and operational limitations to control for formaldehyde and Nitrogen of Oxides (NOx) emissions. The owner/operator is proposing that the parameter monitoring, reporting and recordkeeping requirements.

2. Monitoring Approach Description (Current NOx RACT Permit Requirement Scenario)

2.1 Indicators Monitored: Catalyst bed inlet temperature, catalyst bed outlet temperature, pressure differential across catalyst bed, O2 engine exhaust concentration, catalyst integrity.

2.2 Rationale for Monitoring Approach:

SECTION D. Source Level Requirements

2.2.1 Catalyst bed inlet temperature: Indication that the gas stream is a sufficient temp. to initiate reduction on the catalyst bed.

2.2.2 Catalyst bed outlet temperature: Indication that the reaction is occurring in the catalyst bed.

2.2.3 Pressure differential across catalyst bed: Increase in pressure differential indicates that the bed is becoming fouled or plugged.

2.2.4 Exhaust O₂ concentration: The O₂ content of the uncontrolled stream must be below 0.5% to ensure NO_x reduction.

2.2.5 Catalyst Integrity: Periodic physical inspection of catalyst for evidence of damage or fouling as indication of the catalyst's ability to promote the reduction of NO_x.

2.3 Monitoring Location:

2.3.1 Catalyst bed inlet/outlet temperature: Inlet/outlet to the catalyst bed.

2.3.2 Pressure differential across catalyst bed: Inlet/outlet of catalyst bed.

2.3.3 Exhaust O₂ concentration: Engine exhaust, prior to catalyst bed.

2.3.4 Catalyst integrity: Catalyst bed

2.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges; O₂ sensor.

2.5 Data Acquisitions and Measurement System Operation

2.5.1 Frequency of measurement:

2.5.1.1 Catalyst bed inlet/outlet temperature: Measure continuously.

2.5.1.2 Pressure differential across catalyst bed: Measure continuously

2.5.1.3 Exhaust O₂ concentration: Measure continuously

2.5.1.4 Catalyst integrity: Annual inspection

2.5.2 Reporting Units

2.5.2.1 Catalyst bed inlet/outlet temperature: Fahrenheit

2.5.2.2 Pressure differential across catalyst bed: inches water column (WC)

2.5.2.3 Exhaust O₂ concentration: Percent O₂

2.5.2.4 Catalyst integrity: Catalyst physical appearance

2.5.3 Recording process:

SECTION D. Source Level Requirements

2.5.3.1 Catalyst bed inlet/outlet temperature: Record measurement in operator log once per shift.

2.5.3.2 Pressure differential: Record measurement on operator log once per shift.

2.5.3.3 Exhaust O₂ concentration: Record measurement O₂ levels once per shift.

2.5.3.4 Catalyst integrity: Maintain record of annual inspections on file.

2.6 Data Requirements

2.6.1 Baseline catalyst bed inlet and outlet temperatures concurrent with emission test.

2.6.2 Historical plant records of catalyst bed inlet and outlet temperatures and catalyst integrity.

2.7 Specific QA/QC Procedures: Calibrate, maintain and operate instrumentations using good operating/maintenance practices and procedures recommended by equipment manufacturer.

3. Monitoring Approach Description.

3.1 Indicators Monitored.

3.1.1 Catalyst bed inlet temperature.

3.1.2 Pressure differential across catalyst bed.

3.1.3 Catalyst integrity

3.2 Rationale for Monitoring Approach:

3.2.1 Catalyst bed inlet temperature: Indicator that bed inlet is of sufficient temperature to initiate reduction.

3.2.2 Catalyst bed pressure differential: Indication of catalyst bed fouling. Increase in pressure differential indicates that the bed is becoming fouled or plugged.

3.2.3 Catalyst integrity: Physical inspection of catalyst as indication of the catalyst's ability to promote the reduction of NO_x.

3.3 Monitoring Location:

3.3.1 Catalyst bed inlet temperature: Inlet to the catalyst bed.

3.3.2 Catalyst bed pressure differential: Inlet/outlet to the catalyst bed.

3.3.3 Catalyst integrity: Catalyst bed.

3.4 Analytical Devices Required: Thermocouples or other temperature instrumentation; manometers or pressure gauges.

SECTION D. Source Level Requirements

3.5 Data Acquisition and Measurement System Operation.

3.5.1 Frequency of measurement:

- 3.5.1.1 Catalyst bed inlet temperature: Measure continuously.
- 3.5.1.2 Catalyst bed pressure differential: Monthly and during performance testing.
- 3.5.1.3 Catalyst integrity: Annual inspection.

3.5.2 Reporting units:

- 3.5.2.1 Catalyst bed inlet temperature: Fahrenheit
- 3.5.2.2 Catalyst bed pressure differential: Inches water column (WC)
- 3.5.2.3 Catalyst integrity: Catalyst physical appearance

3.5.3 Recording process:

- 3.5.3.1 Catalyst bed inlet temperature: Maintain record of continuous measurements reduced to 4-hour rolling averages.
- 3.5.3.2 Catalyst bed pressure differential: Maintain record of monthly pressure differential measurements with unit operating records.
- 3.5.3.3 Catalyst activity: Maintain record of annual inspection findings on file.

3.6 Data Requirements

- 3.6.1 Baseline catalyst bed inlet temperatures concurrent with emission test.
- 3.6.2 Baseline catalyst bed pressure differential readings concurrent with emission test.
- 3.6.3 Historical plant records of catalyst bed inlet temperatures and catalyst inspections.

III. MONITORING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #16, the Owner/Operator shall maintain O₂ levels below 0.5% on each Ingersoll Rand KVG-410 engine.

**SECTION D. Source Level Requirements**

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #12, the Owner/Operator shall continuously monitor and record once during each operating shift the temperature rise and pressure differential across the catalyst of the Ingersoll Rand KVG-410 engines.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The catalyst of the Ingersoll Rand KVG-410 engines shall be physically inspected annually for physical damage and fouling. A log shall be kept detailing all actions taken to maintain catalyst performance. This file shall be maintained for a period of not less than two years and shall be made available to the Department upon request.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #11, the Owner/Operator shall only use low ash lubricating oil (0.5% or less) in the Ingersoll Rand KVG-410 engines.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #13, the catalytic converter of the Ingersoll Rand KVG-410 engines shall be equipped with a high temperature alarm and/or shutdown set at 1350 degrees Fahrenheit or less.

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 110

Source Name: 2000 HP INGERSOLL RAND 1

Source Capacity/Throughput:

30.000 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #9, the emission rates of each Ingersoll Rand KVS 412 engine shall be limited as follows:

- 78 Tons/Year of Nitrogen Oxides
- 18 Lbs/Hour of Nitrogen Oxides
- 12 Tons/Year of Non-Methane Volatile Organic Compounds
- 3 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 111

Source Name: 2000 HP INGERSOLL RAND 2

Source Capacity/Throughput:

30.000 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #9, the emission rates of each Ingersoll Rand KVS 412 engine shall be limited as follows:

- 78 Tons/Year of Nitrogen Oxides
- 18 Lbs/Hour of Nitrogen Oxides
- 12 Tons/Year of Non-Methane Volatile Organic Compounds
- 3 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: $\text{ppm NO}_x * 0.001208 * \text{mmbtu/hr} = \text{lbs/hr NO}_x$

Equation 2: $\text{ppm CO} * 0.000735 * \text{mmbtu/hr} = \text{lbs/hr CO}$

Equation 3: $\text{ppm VOC} * 0.002258 * \text{mmbtu/hr} = \text{lbs/hr VOC}$

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 112 Source Name: 2000 HP INGERSOLL RAND 3
 Source Capacity/Throughput: 30.000 MCF/HR NATURAL GAS



I. RESTRICTIONS.

Emission Restriction(s).

| | |
|---|------------------------|
| # 001 | [25 Pa. Code §123.13] |
| Processes | |
| Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i). | |
| # 002 | [25 Pa. Code §123.21] |
| General | |
| The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO ₂ , in the effluent gas exceeds 500 parts per million, by volume, dry basis. | |
| # 003 | [25 Pa. Code §127.441] |
| Operating permit terms and conditions. | |
| As established in RACT Operating Permit #65-000-839, Condition #9, the emission rates of each Ingersoll Rand KVS 412 engine shall be limited as follows: | |
| 78 Tons/Year of Nitrogen Oxides | |
| 18 Lbs/Hour of Nitrogen Oxides | |
| 12 Tons/Year of Non-Methane Volatile Organic Compounds | |
| 3 Lbs/Hour of Non-Methane Volatile Organic Compounds | |
| # 004 | [25 Pa. Code §127.441] |
| Operating permit terms and conditions. | |
| In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests. | |
| # 005 | [25 Pa. Code §127.441] |
| Operating permit terms and conditions. | |
| In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement. | |

II. TESTING REQUIREMENTS.

| | |
|--|------------------------|
| # 006 | [25 Pa. Code §127.441] |
| Operating permit terms and conditions. | |
| In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location | |

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 113

Source Name: 2000 HP INGERSOLL RAND 4

Source Capacity/Throughput:

70.000 MCF/HR

NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the outdoor atmosphere from any source in source group SG04 shall not exceed 0.04 grains/dscf as specified in 25 PA Code 123.13(c)(1)(i).

002 [25 Pa. Code §123.21]

General

The Owner/Operator shall not permit the emission into the outdoor atmosphere of sulfur oxides from any source in SG04 in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #9, the emission rates of each Ingersoll Rand KVS 412 engine shall be limited as follows:

- 78 Tons/Year of Nitrogen Oxides
- 18 Lbs/Hour of Nitrogen Oxides
- 12 Tons/Year of Non-Methane Volatile Organic Compounds
- 3 Lbs/Hour of Non-Methane Volatile Organic Compounds

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #21, the Owner/Operator shall submit a pretest protocol for review at least 60 days prior to performance of the stack tests.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #24, reductions in the allowable emission rates below the levels established herein shall not be available as Emission Reduction Credits (ERCs) pursuant to 25 PA Code Section 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, and unless the reductions are achieved through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #20, for those tests utilizing portable analyzers, the company shall submit a complete operating procedure including calibration, QA/QC, and emissions calculation methods to the Department at least 60 days prior to the stack test specified in Condition #5, above. The accuracy of the portable analyzer readings shall be verified by operation and recording of readings during the EPA method stack testing of Condition 5. Results from stack tests using portable analyzers shall be retained by the Owner/Operator at the test location

SECTION D. Source Level Requirements

and shall be provided annually with the emission statements and at other times as required by the Department.

The conversion from ppm to lbs/hr shall be determined using the following equations provided that:

- (a) Readings are corrected to 3% oxygen (15.1% in excess air)
- (b) Readings are determined volumetrically

Equation 1: ppm NO_x * 0.001208 * mmbtu/hr = lbs/hr NO_x

Equation 2: ppm CO * 0.000735 * mmbtu/hr = lbs/hr CO

Equation 3: ppm VOC * 0.002258 * mmbtu/hr = lbs/hr VOC

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #22, the company shall notify the Department at least two weeks prior to the stack tests so an observer may be present at the time of testing.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #23, the company shall submit a stack test report to the Department within 60 days of testing.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #17, a minimum of one (1) stack test in accordance with 25 PA Code Ch139 and the Department Source Testing Manual shall be performed on all sources once every five years after issuance of this permit to verify the emission rates for NO_x (as NO₂), CO, and NMVOC. Testing shall be conducted while engines are operating at full load and full speed.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #18, all sources operating 750 hours or more during the preceding ozone season shall be tested semi-annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with RACT Operating Permit #65-000-839, Condition #19, all sources operating less than 750 hours during the preceding ozone season shall be tested annually to verify the rates of NO_x (as NO₂), CO, and NMVOC through either an EPA Method stack test or through the use of portable analyzers.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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



SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

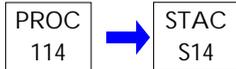
*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 114

Source Name: CAT-3412 EMERGENCY GENERATOR 1

Source Capacity/Throughput:

**I. RESTRICTIONS.****Operation Hours Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #5, each emergency generator shall be limited to 500 hours of operation annually.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

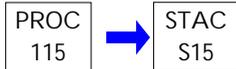
*** Permit Shield in Effect. ***

SECTION D. Source Level Requirements

Source ID: 115

Source Name: CAT-G-398 EMERGENCY GENERATOR 2

Source Capacity/Throughput:

**I. RESTRICTIONS.****Operation Hours Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As established in RACT Operating Permit #65-000-839, Condition #5, each emergency generator shall be limited to 500 hours of operation annually.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***



SECTION D. Source Level Requirements

Source ID: 117

Source Name: AREA FUGITIVES

Source Capacity/Throughput:

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

Source ID: 118

Source Name: SOLAR MARS TURBINE (T-15000)

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

Particulate emissions shall not exceed 0.02 grains per dry standard cubic foot.

002 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

Compliance with the particulate emission rate above shall be demonstrated by stack testing in accordance with Title 25 PA Code Chapter 139 and the Department's Source Testing Manual.

003 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

Visible emissions from the source shall not equal or exceed 10 percent opacity at any time.

004 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

Emissions from the source to the atmosphere of these pollutants shall not exceed the following rates:

| POLLUTANT | POUNDS PER HOUR | TONS PER YEAR |
|---------------------|-----------------|---------------|
| NOX | 13.29 | 58.22 |
| CO | 16.18 | 70.89 |
| NM VOC (AS PROPANE) | .49 | 2.13 |
| FORMALDEHYDE | .17 | .72 |

Compliance with the yearly limit shall be based on a 12-month rolling total.

Fuel Restriction(s).

005 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

Total consumption of natural gas by this source shall not exceed 1,115,000,000 cubic feet for any consecutive 12-month period.

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)A minimum of one stack test in accordance with Title 25 PA Code Chapter 139 and the Department Source Testing Manual shall be performed during every 5 years to verify the emission rates for Nox (as NO₂), CO and NMVOC (as propane). Testing shall be conducted while the engines are operating at full load and full speed.

007 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)

The Owner/Operator shall submit a pre-test protocol to the Department for approval at least 60 days prior to the performance of stack testing.

008 [25 Pa. Code §127.441]

[Operating permit terms and conditions.](#)The owner/operator shall test the source at least once every year (only if the source operates greater than 750 hours) to verify the rates of NO_x (as NO₂) and CO through either an EPA Method stack test or through the use of portable analyzers.

SECTION D. Source Level Requirements

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall notify the Department at least two weeks prior to any source testing so that an observer may be present at the time of testing.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall monitor fuel sulfur content in accordance with the custom system-wide schedule and maintain the results on-site [40 CFR 60.344(b)(2)].

IV. RECORDKEEPING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall maintain the following records for the source: operating hours, daily fuel consumption, 12-month rolling fuel consumption and 12-month rolling emissions for each pollutant.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All logs and required records shall be maintained on site for a minimum of five years and be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall comply with the applicable reporting requirements of 40 CFR 60.7 and 40 CFR 60.334(c).

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

| | |
|-----------------------------|----------------------|
| Director | PADEP |
| Air Toxics and Radiation | Air Quality Control |
| US EPA, Region III | 400 Waterfront Drive |
| Philadelphia, PA 19103-2029 | Pittsburgh, PA 15222 |

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall combust only natural gas with a sulfur content of 0.0036 weight percent or less.

*** Permit Shield in Effect. ***



SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

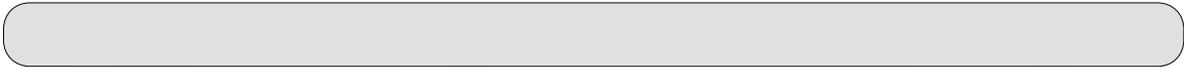


SECTION F. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



SECTION G. Miscellaneous.



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