



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

04/05/05

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

02-10-00-0046
Tennessee Gas Pipeline- Station 214
Scott J Lewis
1211 Greenville Mercer Road
Mercer, PA 16137

Dear Scott J Lewis:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 02/14/05. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

**Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215**

and

Northeast District Office
(330) 425-9171

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Sincerely,

Michael W. Ahern
Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 04/05/05	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 02-10-00-0046 to:
 Tennessee Gas Pipeline- Station 214
 2110 East Aurora Road
 Twinsburg, OH 44087

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B001 (Auxil. Engine No. A1A) Auxiliary Ingersoll Rand Engine PVG-8	P007 (Recip. Engine No. 4A) Ingersoll Rand Gas Engine KVG-123	Ingersoll Rand Gas Engine KVG-412
B002 (Recip. Engine No. 1A) Ingersoll Rand Gas Engine KVG-123	P008 (Recip. Engine No. 5A) Ingersoll Rand Gas Engine KVG-123	P013 (Recip. Engine No. 10A) Ingersoll Rand Gas Engine KVS-412
P002 (Auxil. Engine No. A2A) Auxiliary Ingersoll Rand Engine PVG-8	P009 (Recip. Engine No. 6A) Ingersoll Rand Gas Engine KVG-123	P014 (Recip. Engine No. 11A) Ingersoll Rand Gas Engine KVS-412
P003 (Auxil. Engine No. A3A) Auxiliary Ingersoll Rand Engine PVG-8	P010 (Recip. Engine No. 7A) Ingersoll Rand Gas Engine KVG-123	P015 (Recip. Engine No. 12A) Ingersoll Rand Gas Engine KVS-412
P005 (Recip. Engine No. 2A) Ingersoll Rand Gas Engine KVG-123	P011 (Recip. Engine No. 8A) Ingersoll Rand Gas Engine KVG-123	P016 (Recip. Engine No. 13A) Ingersoll Rand Gas Engine KVS-412
P006 (Recip. Engine No. 3A) Ingersoll Rand Gas Engine KVG-123	P012 (Recip. Engine No. 9A)	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
 (330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

 Joseph P. Koncelik
 Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

- i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

- v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the 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 federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports

shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent “modification” or “installation” as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an “emissions unit” as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;
- b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. The following insignificant emissions unit is located at this facility:

T001: T-2 1500-gallon diesel fuel storage tank - PTI No. 02-058 (effective February 11, 1981)

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

(Authority for term: OAC rule 3745-77-07(A)(13))

2. There are fugitive VOC emissions from this facility which have been identified in the permit application and which, in aggregate, would constitute a non-insignificant source. These emissions are not currently subject to any applicable requirements, but shall be included in the annual fee emission report.
3. The following emissions units located at this facility are subject to 40 CFR Part 63, Subpart ZZZZ-- National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE):

B002 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P005 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P006 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P007 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P008 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P009 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P010 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine;
P011 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine; and
P012 - 1320 HP, natural gas fired, 4-cycle rich burn compressor station engine.

Beginning on June 15, 2007, these emissions units shall comply with the requirements listed below.

4. The permittee shall keep the records below:
 - 4.a a copy of each notification and report submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation, supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR Part 63.10(b)(2)(xiv);
 - 4.b the records in 40 CFR Parts 63.6(e)(3)(iii) through 63.6(e)(3)(v) related to startup, shutdown, and malfunction; and
 - 4.c records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii).
5. For each CPMS (Continuous Parameter Monitoring System), the permittee shall keep the records listed below:
 - 5.a Records described in 40 CFR Parts 63.10(b)(2)(vi) through 63.10(b)(2)(xi); and
 - 5.b previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(f)(6)(i), if applicable.

(Authority for term: 40 CFR Part 63.6655(b))

6. The permittee shall keep the records required in Table 6 (See Part III, A.III Record keeping Requirements) of this subpart to show continuous compliance with each emission or operating limitation that applies.

(Authority for term: 40 CFR Part 63.6655(d))

A. State and Federally Enforceable Section (continued)

- 7.a** Records must be kept in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).
- 7.b** As specified in 40 CFR Part 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- 7.c** Each record must be kept readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Part 63.10(b)(1). The records may be kept off-site for the remaining 3 years.

(Authority for term: 40 CFR Parts 63.6660(a), 63.6660(b), and 63.6660(c))

8. 40 CFR Part 63, Subpart A

The permittee is subject to the general requirements specified in 40 CFR Part 63, Subpart A in accordance with 40 CFR Part 63, Subpart A (including the Table(s) and Appendix(ices) referenced in Subpart A) as described in Table 8 of Subpart ZZZZ of Part 63. The requirements of Table 8 of Subpart ZZZZ of Part 63 and Subpart A, which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully written. Ordinarily, these requirements would be incorporated into Part III of this permit; however, incorporating either Table 8 or Subpart A into Part III of this permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into STARS format.

B. State Only Enforceable Section

- 1.** The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

T001 T-4 waste oil tank;
Z015 T-1 gasoline tank;
Z016 T-3 new lube oil tank;
Z017 T-5 pipeline drip tank;
Z019 T-7 lube oil rundown tank;
Z020 pigging blowdown;
Z021 emergency shutdown;
Z022 J. Water Heater 1A;
Z023 J. Water Heater 2A; and
Z025 Safety Kleen parts washer.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Auxil. Engine No. A1A (B001)
Activity Description: Auxiliary Ingersoll Rand Engine PVG-8

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model PVG8, 408 HP, 4.48 MMBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating auxiliary generator engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.25 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(a)	PE shall not exceed 0.310 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(a). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d** This emissions unit is exempt from these requirements as this engine has a site-rating of less than 500 brake horsepower.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:

PE shall not exceed 0.25 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.310 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 1A (B002)

Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

- 3.** No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a** Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b** Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

- 5.** Beginning on June 15, 2007 the permittee shall:

- 5.a** Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b** reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c** maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d** measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

- 1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

- 3.** The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

- 4.** The permittee shall submit semiannual compliance reports.

- 4.a** The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Auxil. Engine No. A2A (P002)
Activity Description: Auxiliary Ingersoll Rand Engine PVG-8

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model PVG8, 408 HP, 4.48 MMBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating auxiliary generator engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.25 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(a)	PE shall not exceed 0.310 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(a). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d This emissions unit is exempt from these requirements as this engine has a site-rating of less than 500 brake horsepower.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:

PE shall not exceed 0.25 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.310 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Auxil. Engine No. A3A (P003)
Activity Description: Auxiliary Ingersoll Rand Engine PVG-8

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model PVG8, 408 HP, 4.48 MMBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating auxiliary generator engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.25 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(a)	PE shall not exceed 0.310 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(a). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

(Authority for term: OAC rule 3745-18-06(A))

2. Additional Terms and Conditions (continued)

- 2.d** This emissions unit is exempt from these requirements as this engine has a site-rating of less than 500 brake horsepower.

(Authority for term: 40 CFR 63.6590 (a))

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a** Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b** Emission Limitation:
PE shall not exceed 0.25 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.310 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 2A (P005)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

- 3.** No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a** Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b** Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

- 5.** Beginning on June 15, 2007 the permittee shall:

- 5.a** Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b** reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c** maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d** measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

- 1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

- 3.** The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

- 4.** The permittee shall submit semiannual compliance reports.

- 4.a** The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 3A (P006)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 4A (P007)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

4.b Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

5. The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 5A (P008)

Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 6A (P009)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 7A (P010)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

- 5.a** the company name and address;
- 5.b** a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
- 5.c** date of report and beginning and ending dates of the reporting period;
- 5.d** if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);
- 5.e** if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;
- 5.f** if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and
- 5.g** for each deviation from an operating limitation, the following information must be included in the compliance report:
- i. the date and time that each malfunction started and stopped;
 - ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;
 - iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);
 - iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;
 - v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;
 - vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
 - vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;
 - viii. an identification of each parameter that was monitored at the emissions unit;
 - ix. a brief description of the emissions unit;
 - x. a brief description of the CPMS;
 - xi. the date of the latest CPMS certification or audit; and
 - xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 8A (P011)
Activity Description: Ingersoll Rand Gas Engine KVG-123

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

4.b Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

5. The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:
PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 9A (P012)
Activity Description: Ingersoll Rand Gas Engine KVG-412

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVG123, 1320 HP, 14.52 mmBtu/hr., natural gas-fired, 4-cycle/rich burn, reciprocating pipeline compressor engine. (Reciprocating Internal Combustion Engine - RICE)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.d through A.I.2.f, A.II.2., and A.II.3 below. Also see Part II - A.3 through A.8 of this permit.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

2. Additional Terms and Conditions (continued)

- 2.d** Beginning on June 15, 2007, the permittee shall reduce formaldehyde emissions at this emissions unit by 76 percent or more at 100 percent load plus or minus 10 percent.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(a) to Subpart ZZZZ of Part 63)

- 2.e** Beginning on June 15, 2007, the permittee must be in compliance with the requirements listed in A.I.2.d, A.II.2, and A.II.3 all times, except during periods of startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(a))

- 2.f** Beginning on June 15, 2007, the permittee shall operate and maintain this emissions unit, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

(Authority for term: 40 CFR Part 63.6605(b))

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

- 2.** Beginning on June 15, 2007, the permittee shall maintain the 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.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 3.** Beginning on June 15, 2007, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 740 degrees Fahrenheit and less than or equal to 1250 degrees Fahrenheit at all loads.

(Authority for term: 40 CFR Part 63.6600(a) and Table 1(b) to Subpart ZZZZ of Part 63)

- 4.** Beginning on June 15, 2007, during periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(c))

- 5.** Consistent with 40 CFR Part 63.6(e) and 40 CFR Part 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the emissions unit was operating in accordance with the startup, shutdown, and malfunction plan.

(Authority for term: 40 CFR Part 63.6640(d))

III. Monitoring and/or Record Keeping Requirements

- 1.** For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

- 2.** No later than June 15, 2007, the permittee shall install, calibrate, operate, and maintain equipment to continuously monitor and record the catalyst inlet temperature while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). This shall be accomplished in accordance with the requirements in 40 CFR Part 63.8.

(Authority for term: 40 CFR Part 63.6625(b) and Table 5 of Subpart ZZZZ of Part 63)

III. Monitoring and/or Record Keeping Requirements (continued)

3. No later than June 15, 2007, the permittee shall properly operate and maintain equipment to monitor the pressure drop across the catalyst bed while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the catalyst bed on monthly basis.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63))

- 4.a Beginning on June 15, 2007, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor for (inlet temperature to and pressure drop across the catalyst bed) continuously at all times that the stationary RICE is operating.

(Authority for term: 40 CFR Part 63.6635(b))

- 4.b Beginning on June 15, 2007, data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. However, all the valid data collected during all other periods must be used.

(Authority for term: 40 CFR Part 63.6635(c))

5. Beginning on June 15, 2007 the permittee shall:

- 5.a Collect the catalyst inlet temperature data continuously according to A.III.4.a;
- 5.b reduce these data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- 5.c maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 740 degrees and 1250 degrees Fahrenheit); and
- 5.d measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the most recent performance test which demonstrated compliance.

(Authority for term: 40 CFR Part 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63)

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

2. The permittee shall submit all of the notifications in 40 CFR Parts 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), 63.9(b) through 63.9(e), and 63.9(g) and 63.9(h) that apply to this emissions unit by the dates specified in this regulation.

(Authority for term: 40 CFR Part 63.6645(a))

3. The permittee shall submit a Notification of Compliance Status according to 40 CFR Part 63.9(h)(2)(ii).

(Authority for term: 40 CFR Part 63.6645(f))

4. The permittee shall submit semiannual compliance reports.

- 4.a The first semiannual compliance report shall cover the period beginning on June 15, 2007 and ending on June 30, 2007. The first compliance report must be postmarked or delivered no later than July 31, 2007.

IV. Reporting Requirements (continued)

- 4.b** Each subsequent compliance report must cover the semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(Authority for term: 40 CFR Parts 63.6650(b)(1) through 63.6650(b)(4))

- 5.** The compliance report must contain the following information:

5.a the company name and address;

5.b a statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

5.c date of report and beginning and ending dates of the reporting period;

5.d if there was a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR Part 63.10(d)(5)(i);

5.e if there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;

5.f if there were no periods during which the CPMS was out-of-control, as specified in 40 CFR Part 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period; and

5.g for each deviation from an operating limitation, the following information must be included in the compliance report:

i. the date and time that each malfunction started and stopped;

ii. the date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Part 63.8(c)(8);

iv. the date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

v. a summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;

vi. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the emissions unit at which the CPMS downtime occurred during that reporting period;

viii. an identification of each parameter that was monitored at the emissions unit;

ix. a brief description of the emissions unit;

x. a brief description of the CPMS;

xi. the date of the latest CPMS certification or audit; and

xii. a description of any changes in CPMS, processes, or controls since the last reporting period.

(Authority for term: 40 CFR Parts 63.6650(c)(1) through 63.6650(c)(6) and 63.6650(e) through 63.6650(e)(12))

IV. Reporting Requirements (continued)

6. The permittee must report all deviations as defined in Subpart ZZZZ of Part 63 in the semiannual monitoring report required by 40 CFR Part 70.6 (a)(3)(iii)(A) or 40 CFR Part 71.6(a)(3)(iii)(A). If the permittee submits a compliance report pursuant to Table 7 of Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR Part 70.6(a)(3)(iii)(A) or 40 CFR Part 71.6(a)(iii)(A), and the compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submissions of a compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority.

(Authority for term: 40 CFR Part 63.6650(f))

7. The permittee must submit an immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with the permittee's startup, shutdown, or malfunction plan. The report must contain actions taken for the event. The permittee must submit the report by fax or telephone within 2 working days after starting actions inconsistent with the plan. The permittee must also submit the information in 40 CFR Part 63.10(d)(5)(ii). This information must be submitted by letter within 7 working days after the end of the event unless the permittee made alternative arrangements with the Ohio EPA.

(Authority for term: Table 7 of Subpart ZZZZ to Part 63)

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0095 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- 2.a** The initial emission testing shall be conducted before December 12, 2007.

(Authority for term: 40 CFR Part 63.6610(a))

- 2.b** The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR Part 63.7(b)(1).

(Authority for term: 40 CFR Part 63.6645(e))

- 2.c** The emission testing shall be conducted to determine the formaldehyde reduction across the control equipment; to establish the pressure drop, in inches of water, across the catalyst; and to document that the catalyst inlet temperature is between 750 degrees F and 1250 degrees F.

(Authority for term: 40 CFR Part 63.6600(a) and Tables 1(a) and 1(b) to Subpart ZZZZ of Part 63)

- 2.d** When the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitation applicable to this emissions unit is met.

(Authority for term: 40 CFR Part 63.6640(b))

- 3.** The testing shall be conducted as follows:

- 3.a** Select the sampling port locations and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR Part 63.7(d)(1)(i). The sampling sites must be located at the inlet and outlet of the control device.

- 3.b** Measure the oxygen concentrations at the inlet and outlet of the control device using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A. Measurements to determine oxygen concentration must be made at the same time as the measurements for formaldehyde concentration.

- 3.c** Measure the moisture content at the inlet and outlet of the control device using Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

V. Testing Requirements (continued)

- 3.d** Measure formaldehyde at the inlet and the outlet of the control device using Method 320 or 323 of 40 CFR Part 63, Appendix A; or ASTM D6348-03, 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. Formaldehyde concentration must be at 15 percent oxygen, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

NOTE: A copy of ASTM D6348-03 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(Authority for term: 40 CFR Part 63.6610(a) and Table 4 to Subpart ZZZZ of Part 63)

- 4.** Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in A.IV.3. above. The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

(Authority for term: 40 CFR Part 63.6620(b))

- 5.** Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

(Authority for term: 40 CFR Part 63.6620(c))

- 6.** Three separate test runs must be conducted for each performance test requested in this section, as specified in 40 CFR Part 63.7(e)(3). Each test run must last at least one hour.

(Authority for term: 40 CFR Part 63.5520(d))

- 7.** The following equation must be used to determine compliance with the percent reduction requirement:

$$(C_i - C_o / C_i) \times 100 = R$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet;
 C_o = concentration of CO or formaldehyde at the control device outlet; and
 R = percent reduction of CO or formaldehyde emissions.

(Authority for term: 40 CFR Part 63.6620(e)(1))

- 8.** The CO or formaldehyde concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentration is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described in A.V.8.a through A.V.8.c below.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

V. Testing Requirements (continued)

- 8.a** Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = 0.209 F_d / F_c$$

Where:

F_o = fuel factor based on the ratio of oxygen volume to the ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = fraction of air that is oxygen, percent/100; and

F_d = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm cubed/J (dscf/MMBtu).

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.b** Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen as follows:

$$X_{co2} = 5.9 / F_o$$

Where:

X_{co2} = carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen - 15 percent oxygen, the defined oxygen correction value, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 8.c** Calculate the nitrogen oxides and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide as follows:

$$C_{adj} = C_d (X_{co2} / \text{percent carbon dioxide})$$

Where:

percent carbon dioxide = measured carbon dioxide concentration measured, dry basis, percent.

(Authority for term: 40 CFR Parts 63.6620(e)(1) and 63.6620(e)(2))

- 9.** The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, the pressure, and the humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, heat analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

(Authority for term: 40 CFR Part 63.6620(i))

- 10.** The permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR Part 63.10(d)(2).

(Authority for term: 40 CFR Part 63.6645(f)(2))

VI. Miscellaneous Requirements

- 1.** The permittee has demonstrated initial compliance with the requirements in Subpart ZZZZ of 40 CFR Part 63 if:
 - 1.a** the average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction (76 percent);
 - 1.b** a CPMS (continuous parametric monitoring system) to continuously monitor the catalyst inlet temperature according to the requirements in 40 CFR Part 63.6625(b) has been installed;
 - 1.c** the catalyst pressure drop and catalyst inlet temperature during the initial performance test was recorded; and
 - 1.d** the Notification of Compliance Status containing the results of the initial compliance demonstration have been submitted according to the requirements in 40 CFR Part 63.6645.

(Authority for term: 40 CFR Part 63.6630(a) and Table 5 of Subpart ZZZZ to Part 63)

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 10A (P013)
Activity Description: Ingersoll Rand Gas Engine KVS-412

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVS412, 2000 HP, 22 MMBtu/hr., natural gas-fired, 4-cycle/lean burn, reciprocating pipeline compressor engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(b)	See A.I.2.a below. PE shall not exceed 0.062 lb/MMBtu actual heat input.
	OAC rule 3745-18-06(G)	See A.I.2.b below. This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A).
	40 CFR Part 63, Subpart ZZZZ	See A.I.2.c below. This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(b)(3).
		See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d** This emissions unit is exempt from 40 CFR Part 63, Subpart ZZZZ as this emissions unit is a 4-cycle lean burn engine.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 11A (P014)
Activity Description: Ingersoll Rand Gas Engine KVS-412

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVS412, 2000 HP, 22 MMBtu/hr., natural gas-fired, 4-cycle/lean burn, reciprocating pipeline compressor engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(b)(3). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d** This emissions unit is exempt from 40 CFR Part 63, Subpart ZZZZ as this emissions unit is a 4-cycle lean burn engine.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

- 1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 12A (P015)

Activity Description: Ingersoll Rand Gas Engine KVS-412

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVS412, 2000 HP, 22 MMBtu/hr., natural gas-fired, 4-cycle/lean burn, reciprocating pipeline compressor engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(b)(3). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d** This emissions unit is exempt from 40 CFR Part 63, Subpart ZZZZ as this emissions unit is a 4-cycle lean burn engine.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)).

- 1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Engine No. 13A (P016)
Activity Description: Ingersoll Rand Gas Engine KVS-412

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ingersoll Rand model KVS412, 2000 HP, 22 MMBtu/hr., natural gas-fired, 4-cycle/lean burn, reciprocating pipeline compressor engine.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.35 lb/MMBtu actual heat input. See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu actual heat input. See A.I.2.b below.
	OAC rule 3745-18-06(G)	This emissions unit is exempt from this requirement pursuant to OAC rule 3745-18-06(A). See A.I.2.c below.
	40 CFR Part 63, Subpart ZZZZ	This emissions unit is exempt from this requirement pursuant to 40 CFR Part 63.6590(b)(3). See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The requirement to comply with this PE limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/MMBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b** This PE limitation shall be effective and federally enforceable on the date the U.S. EPA approves this PE limitation as a revision to the Ohio SIP for particulate matter.
- 2.c** This emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.
- 2.d** This emissions unit is exempt from 40 CFR Part 63, Subpart ZZZZ as this emissions unit is a 4-cycle lean burn engine.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1))

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)).

- 1.b Emission Limitation:

PE shall not exceed 0.35 lb/MMBtu actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

V. Testing Requirements (continued)

- 1.c** Emission Limitation:
PE shall not exceed 0.062 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.0000771 lb/MMBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1))

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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ATTACHMENT I

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 area sources that become major 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	
§ 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	
§ 63.7(g)	Performance test data analysis, record keeping, 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	
§ 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 criterion for 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
§ 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 reserved
§ 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 exceedances 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 record keeping/reporting	Yes	
§ 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	