Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

8/3/2016

Certified Mail

Abby Credicott
East Ohio Gas - Chippewa Station
5000 Dominion Blvd
Glen Allen, VA 23060

Facility ID: 0285000366
Permit Number: P0120411
County: Wayne

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio Environmental Protection Agency (EPA)Preliminary Proposed Title V permit that was issued in draft form on 6/24/2016. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA 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. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

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 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

Michael E. Hopkins, P.E
Assistant ChiefPermitting Section, DAPC

Cc: Ohio EPA DAPC, Northeast District Office

Response to Comments

Facility ID:	0285000366
Facility Name:	East Ohio Gas - Chippewa Station
Facility Description:	Natural gas distribution
Facility Address:	17045 Galehouse Road Doylestown, OH 44230 Wayne County
Permit:	P0120411, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Daily Recorder on 06/28/2016. The comment period ended on 07/28/2016.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None

a. Comment: None

b. Response: None

PRELIMINARY PROPOSED

Division of Air Pollution Control
Title V Permit
for
East Ohio Gas - Chippewa Station

Facility ID:	0285000366
Permit Number:	P0120411
Permit Type:	Renewal
Issued:	8/3/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
East Ohio Gas - Chippewa Station

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Authorization

Facility ID:	0285000366
Facility Description:	Natural gas distribution
Application Number(s):	A0055339
Permit Number:	P0120411
Permit Description:	Title V renewal permit for natural gas distribution station.
Permit Type:	Renewal
Issue Date:	8/3/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0107354

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

East Ohio Gas - Chippewa Station
17045 Galehouse Road
Doylestown, OH 44230

Ohio Environmental Protection Agency (EPA)District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)963-1200

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. 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 C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) 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 recordingsfor 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:

(1) 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 Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) 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 submittedscheduled maintenancerequests, 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))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions 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 submitted promptly to the Ohio EPA DAPC, Northeast District Office. 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 deviation reports shall satisfy the requirements 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. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

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 satisfies the reporting requirements specified in this Standard 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 (for the deviations so reported) the requirements 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 Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

(3) 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 Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally

enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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 and 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 Standard Term and Condition A.2.c)(2) 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) and OAC rule 3745-77-07(A)(13)(b))

(4) 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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 Standard Term and Condition A.2.c)(1) above.

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

4. 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))

5. 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))

6. 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))

7. General Requirements

a) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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))

9. 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))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. 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))

12. 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))

13. 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:

(1) 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.

(2) 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.

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

(4) 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 Ohio EPA DAPC, Northeast District Office 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:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) 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 Ohio EPA DAPC, Northeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) 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.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms

and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) 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))

14. 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))

15. 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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))

16. 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))

17. 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, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). 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))

18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

20. 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))

21. 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))

22. 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 from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which 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 Title V permit 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.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified 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.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

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 theOhio EPA DAPC, Northeast District Office.

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 Ohio EPA DAPC, Northeast District Office. 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, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Ohio EPA DAPC, Northeast District Office 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).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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 Standard Term and Condition A.2.c)(2); or

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 potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Although Ohio EPA has determined that this Generally Available Control Technology NESHAP (GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ - Standards of Performance (NSPS) for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE): B010 and B014. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoacess.gov or by contacting the Ohio EPA Northeast District Office.

4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters: B006 – B008 and B011. The complete NESHAP requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Northeast District Office.

   The permittee must comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 10 of 40 CFR Part 63, Subpart DDDDD. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart DDDDD, and Subpart A.

5. Air contaminant sources that qualify as de minimis under OAC rule 3745-15-05, or are exempt under OAC rule 3745-31-03(A)(1) or (4) are not subject to emission standards established within this permit. Although this permit does not apply to de minimis or exempt sources, emissions from de minimis or exempt sources must be included in the total potential to emit (PTE) calculations for this permit.

6. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

   B012 – Pipeline heater: 40 CFR Part 63, Subpart DDDDD

   B013 – Boiler: 40 CFR Part 63, Subpart DDDDD

C. Emissions Unit Terms and Conditions

1. B005: Auxiliary Generator: Stationary Spark Ignition (SI) Internal Combustion Engine (ICE)

Operations, Property and/or Equipment Description:

690 horsepower (hp) emergency generator: CAT 3412

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [PTI P0108195]	Nitrogen oxides (NO_x) emissions shall not exceed 21.61 lbs/hr and 39.49 tpy. See c)(2).
b.	OAC rule 3745-31-05(A) [PTI P0108195]	Particulate emissions (PE) shall not exceed 1.29 lbs/hr. See c)(1).
c.	OAC rule 3745-18-06(G)	Stationary ICE that burn only natural gas are exempt from the requirements of OAC rule 3745-18-06.
d.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 pound per million Btu (lb/mmBtu) of actual heat input.
e.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
f.	40 CFR Part 63, Subpart ZZZZ [63.6590(b)(3)(ii)]	See b)(2)a.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR 63.6590(b)(3)(ii), because this emissions unit is an existing spark ignition 4 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, this emissions unit is not required to comply with 40 CFR Part 63, Subparts A and ZZZZ, including initial notification requirements.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0108195]

(2) The total annual operating hours for this emissions unit, measured on a rolling, 365-day cumulative total basis shall not exceed 3,655 hours.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0108195]

d) Monitoring and/or Recordkeeping 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) and PTI P0108195]

(2) The permittee shall maintain daily records of the operation of this emissions unit which indicate the following information:

a. the date and time of each start-up and shut down of this emissions unit;

b. the number of hours each day that this emissions unit is operated; and

c. the total cumulative hours of operation of this emissions unit on a rolling, 365-day basis.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. each day when a fuel other than natural gas was burned in this emissions unit; and

b. any day when the rolling 365-day cumulative hours of operation exceeded 3,655.

Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

NO_x emissions shall not exceed 21.61 lbs/hr and 39.49 tpy.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be demonstrated by multiplying the NO_x emission factor (4.08 lbs/mmBtu) by the rated capacity of this emissions unit (5.15 mmBtu/hr). The NO_x emission factor was obtained from U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollutant Emission Factors, Section 3.2, Table 3.2-2 (7/00).

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7 or 7E.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (21.61 lbs/hr) by the maximum allowable annual hours of operation (3,655 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

b. Emission Limitation:

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

c. Emission Limitation:

PE shall not exceed 1.29 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the particulate emission factor (0.00998 lb/mmBtu) by the rated capacity of the engine (5.15 mmBtu/hour). The emission factor was obtained from AP-42, Fifth Edition, Section 3.2, Table 3.2-2 (7/00) and is the sum of filterable and condensable PE.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

d. Emission Limitation:

Visible PE 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 the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0108195]

g) Miscellaneous Requirements

(1) None.

2. B009, Engine 5: Spark Ignition (SI) Internal Combustion Engine (ICE)

Operations, Property and/or Equipment Description:

2,370 hp pipeline compressor w/catalyst: CAT G3608-LE-TA

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI 02-21803]	Nitrogen oxides (NO_x) emissions shall not exceed 3.66 pounds per hour and 16.03 tons per year. Carbon monoxide (CO) emissions shall not exceed 1.0 pound per hour and 4.4 tons per year. Volatile organic compounds (VOC) emissions shall not exceed 0.95 pound per hour and 4.16 tons per year. Particulate emissions (PE) shall not exceed 0.99 pound per hour and 4.34 tons per year.
b.	OAC rule 3745-18-06(G)	Stationary ICE that burn only natural gas are exempt from the requirements of OAC rule 3745-18-06. See c)(1).
c.	OAC rule 3745-17-11(B)(5)b	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
d.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
e.	40 CFR Part 60, Subpart JJJJ 40 CFR 60.4230(a)(3)(i)	Exempt. Manufactured before July 1, 2007. See 40 CFR 60.4230(a)(3)(i).
f.	40 CFR Part 63, Subpart ZZZZ 40 CFR 63.6580 – 63.6675	The permittee shall reduce CO emissions by 93% or more at 100% load (+/- 10%). See c)(2) - c)(8).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR Part 63, Subpart A 40 CFR 63.1 – 63.16	Table 8 to Subpart ZZZZ of 40 CFR Part 63 – Applicability of General Provisions to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(2) The permittee shall:

a. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100% load (+/- 10%) from the pressure drop across the catalyst that was measured during the initial performance test; and

b. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(3) The permittee shall install a continuous parametric monitoring system (CPMS) to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b).

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(4) The permittee must 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: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(5) During periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(6) This emissions unit shall be operated in compliance with the applicable emission limitation and operating limitations at all times, except during periods of startup, shutdown and malfunction.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

(7) 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: OAC rule 3745-77-07(A)(1) and PTI 02-21803]

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

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

d) Monitoring and/or Recordkeeping 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) and PTI 02-21803]

(2) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6625(b), Table 5 of Subpart ZZZZ and PTI 02-21803]

(3) 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 the catalyst bed continuously at all times that the stationary RICE is operating.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6635(b) and PTI 02-21803]

(4) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6635(c) and PTI 02-21803]

(5) The permittee shall:

a. collect the catalyst inlet temperature data continuously according to d)(2);

b. reduce the data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;

c. maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 450° F and 1350° F); and

d. measure the pressure drop across the catalyst once/month at 100% load (+/- 10%) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6640(a), Table 6 of Subpart ZZZZ and PTI 02-21803]

(6) The permittee shall keep the records below:

a. a copy of each notification and report submitted to comply with 40 CFR Part 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) and e)(5);

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

c. records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii).

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI 02-21803]

(7) For each CPMS (Continuous Parameter Monitoring System), the permittee shall keep the records listed below:

a. records described in 40 CFR Parts 63.10(b)(2)(vi) through 63.10(b)(2)(xi); and

b. previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3), if applicable.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI 02-21803]

(8) The permittee shall keep the records required in d)(5) and in Table 6 of 40 CFR Part 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies as specified in c)(2).

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI 02-21803]

(9) For all records kept in accordance to d)(2) through d)(8):

a. Records must be kept in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

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.

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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6660 and PTI 02-21803]

e) 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) and PTI 02-21803]

(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 40 CFR Part 63, Subpart ZZZZ.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6645(a) and PTI 02-21803]

(3) The permittee shall submit semiannual compliance reports containing the following information:

a. the company name and address;

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

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

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);

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;

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

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.

The semiannual compliance report must cover the period from January 1 - June 30 or the period from July 1 - December 31. Each 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6650(c)(1)-(c)(6) and (e)-(e)(12) and PTI 02-21803]

(4) The permittee must report all deviations as defined in Subpart ZZZZ of 40 CFR 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6650(f) and PTI 02-21803]

(5) 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: OAC rule 3745-77-07(C)(1), Table 7 of Subpart ZZZZ and PTI 02-21803]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

NO_x emissions shall not exceed 3.66 lbs/hr and 16.03 tpy

<u>Applicable Compliance Method</u>:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the vendor provided emission factor (1.54E-03 lb/hp-hr) by the rated capacity of the engine (2,370 hp).

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (3.66 lbs/hr) by the maximum annual hours of

operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-21803]

b. Emission Limitation:

CO emissions shall not exceed 1.0 lb/hr and 4.4 tpy

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the vendor provided emission factor (2.75 g/hp-hr) by the rated capacity of the engine (2,370 hp), by the conversion (2.205E-03 lb/g) and by the vendor supplied control efficiency (1-0.93).

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (1.0 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-21803]

c. Emission Limitation:

VOC emissions shall not exceed 0.95 lb/hr and 4.16 tpy

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the VOC emission factor (0.118 lb/mmBtu) by the rated capacity of the engine (16.02 mmBtu/hr) and by the typical minimal control efficiency of an oxidation catalyst (1-0.50). The emission factor was obtained from AP-42, Fifth Edition, Section 3.2, Table 3.2-2 (7/00).

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18 or 25/25A, as appropriate.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.95 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI 02-21803]

d. Emission Limitation:

PE shall not exceed 0.99 lb/hr and 4.34 tpy

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the OAC rule 3745-17-11(B)(5)(b) rule limitation (0.062 lb/mmBtu) by the rated capacity of the engine (16.02 mmBtu/hr).

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.99 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI 02-21803]

e. Emission Limitation:

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-21803]

f. Emission Limitation:

Visible PE from any stack 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 the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI 02-21803]

g. Emission Limitation:

The permittee shall reduce CO emissions by 93% or more at 100% load (+/- 10%).

Applicable Compliance Method:

Compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in f)(2) through f)(10).

[Authority for term: OAC rules 3745-77-07(C)(1)]

(2) The permittee shall conduct performance testing for this emissions unit in accordance with the following requirements to demonstrate compliance with the requirements in 40 CFR Part 63, Subpart ZZZZ:

a. The initial performance testing shall be conducted within 180 days of initial startup. Subsequent performance tests shall be conducted semiannually. After demonstrating compliance for two consecutive tests, the frequency of subsequent tests may be reduced to annually. If the results of any subsequent annual performance test indicate that the emissions unit is not in compliance with the CO emission limitation, or if there is a deviation from any operating limitation, semiannual performance tests must be resumed.

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).

c. The performance testing shall be conducted to determine the CO 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 450° F and 1350° F.

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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6610(a), 63.6645(e), 63.6600(a), 63.6640(b), Tables 1(a) &1(b) to Subpart ZZZZ and PTI 02-21803]

(3) The testing shall be conducted as follows:

a. Measure the O_2 at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to ASTM D6522-00 (incorporated by reference, see 40 CFR 63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration. Methods 3A and 10 may also be used as options to ASTM D6522-00.

b. Measure the CO at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to ASTM D6522-00 (incorporated by reference, see 40 CFR 63.14). The CO concentration must be at 15 percent O_2, dry basis. Methods 3A and 10 may also be used as options to ASTM D6522-00.

NOTE: A copy of ASTM D6522-00 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959, or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6610(a), Table 4 to Subpart ZZZZ and PTI 02-21803]

(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 f)(3). The test must be conducted at any load conditions within plus or minus 10 percent of 100 percent load.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(b) and PTI 02-21803]

(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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(c) and PTI 02-21803]

(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: OAC rule 3745-77-07(C)(1), 40 CFR 63.5520(d) and PTI 02-21803]

(7) The following equation must be used to determine compliance with the percent reduction requirement:

$$((Ci - Co) / Ci) \times 100 = R$$

where:

Ci = concentration of CO at the control device inlet;
Co = concentration of CO at the control device outlet; and
R = percent reduction of CO emissions.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(e)(1) and PTI 02-21803]

(8) The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% O_2, or an equivalent percent CO_2. If pollutant concentrations are to be corrected to 15% O_2 and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described below.

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

$Fo = 0.209\ Fd / Fc$

where:

Fo = fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at 0% excess air;
0.209 = fraction of air that is oxygen, percent/100;
Fd = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J (dscf/mmBtu); and
Fc = ratio of the volume CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J (dscf/mmBtu).

b. Calculate the CO_2 correction factor for correcting measurement data to 15% O_2 as follows:

$Xco_2 = 5.9 / Fo$

where:

Xco_2 = CO_2 correction factor, percent; and
5.9 = 20.9% O_2 - 15% O_2, the defined oxygen correction value, percent.

c. Calculate the NO_x and SO_2 gas concentrations adjusted to 15% O_2 using CO_2 as follows:

$Cadj = Cd\ (Xco_2 / \%CO_2)$

where:

$\%CO_2$ = measured CO_2 concentration measured, dry basis, percent.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(e)(1),(2) and PTI 02-21803]

(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 accuracy in percentage of true value must be provided.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(i) and PTI 02-21803]

(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: OAC rule 3745-77-07(C)(1) and PTI 02-21803]

g) Miscellaneous Requirements

(1) None.

3. B010, Engine 6: Spark Ignition (SI) Internal Combustion Engine (ICE)

Operations, Property and/or Equipment Description:

2,370 hp 4SLB CAT G3608

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI P0104773]	Nitrogen oxides (NO_x) emissions shall not exceed 3.66 lbs/hr and 16.0 tpy. Carbon monoxide (CO) emissions shall not exceed 1.0 lb/hr and 4.4 tpy. Volatile organic compounds (VOC) emissions shall not exceed 0.95 lb/hr and 4.16 tpy. Particulate emissions (PE) from this emissions unit shall not exceed 0.99 lb/hr and 4.34 tpy.
b.	OAC rule 3745-18-06(A)	Stationary ICE that burn only natural gas are exempt from the requirements of OAC rule 3745-18-06. See c)(1).
c.	OAC rule 3745-17-11(B)(5)b	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
d.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
e.	40 CFR Part 60, Subpart JJJJ [40 CFR 60.4230 - 4248]	See b)(2)a, b)(2)b, b)(2)c and c)(8).
f.	40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 6675]	The permittee shall reduce CO emissions by 93% or more at 100% load (+/- 10%). See c)(2) through (7).
g.	40 CFR Part 63, Subpart A 40 CFR 63.1 – 63.16	Table 8 to Subpart ZZZZ of 40 CFR Part 63 – Applicability of General Provisions to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The permittee shall comply with the following emission limitations:

i. NO_x emissions shall not exceed 2.0 grams/HP-hr or 160 ppmvd at 15% oxygen.

ii. CO emissions shall not exceed 4.0 grams/HP-hr or 540 ppmvd at 15% oxygen.

iii. VOC emissions shall not exceed 1.0 gram/HP-hr or 86 ppmvd at 15% oxygen.

b. The permittee shall comply with the emission standards specified in §60.4233(a) through (c). The permittee shall also meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply. If the permittee adjusts the engine settings according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance.

c. The permittee shall keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(2) The permittee shall:

a. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100% load (+/- 10%) from the pressure drop across the catalyst that was measured during the initial performance test; and

b. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(3) The permittee shall install a continuous parametric monitoring system (CPMS) to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b).

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(4) 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: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(5) During periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the startup, shutdown, and malfunction plan.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(6) This emissions unit shall be operated in compliance with the applicable emission limitations and operating limitations at all times, except during periods of startup, shutdown and malfunction.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

(7) 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: OAC rule 3745-77-07(A)(1) and PTI P0104773]

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

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0104773]

d) Monitoring and/or Recordkeeping 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) and PTI P0104773]

(2) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6625(b), Table 5 of Subpart ZZZZ and PTI P0104773]

(3) 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 the catalyst bed continuously at all times that the stationary RICE is operating.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6635(b) and PTI P0104773]

(4) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6635(c) and PTI P0104773]

(5) The permittee shall:

a. collect the catalyst inlet temperature data continuously according to d)(2);

b. reduce the data to 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;

c. maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature (between 450° and 1350° Fahrenheit); and

d. measure the pressure drop across the catalyst once per month at 100% load (+/- 10%) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6640(a), Table 6 of Subpart ZZZZ and PTI P0104773]

(6) The permittee shall keep the records below:

a. a copy of each notification and report submitted to comply with 40 CFR Part 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) and e)(5);

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

c. records of performance tests and performance evaluations as required in 40 CFR Part 63.10(b)(2)(viii).

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI P0104773]

(7) For each CPMS (Continuous Parameter Monitoring System), the permittee shall keep the records listed below:

a. records described in 40 CFR Parts 63.10(b)(2)(vi) through 63.10(b)(2)(xi); and

b. previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3), if applicable.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI P0104773]

(8) The permittee shall keep the records required in d)(5) and in Table 6 of 40 CFR Part 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies as specified in c)(2).

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6655 and PTI P0104773]

(9) For all records kept in accordance to d)(2) through d)(8):

a. Records must be kept in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

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.

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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6660 and PTI P0104773]

(10) To comply with 40 CFR 60.4245(a), the permittee shall keep the following records:

a. all notifications submitted to comply with this subpart and all documentation supporting any notification;

b. maintenance conducted on the engine; and

c. documentation that the engine meets the emission standards.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4245 and PTI P0104773]

e) 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) and PTI P0104773]

(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 40 CFR Part 63, Subpart ZZZZ.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6645(a) and PTI P0104773]

(3) The permittee shall submit semiannual compliance reports that contain the following information:

a. the company name and address;

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

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

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);

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;

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

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.

The semiannual compliance report must cover the period from January 1 - June 30 or the period from July 1 - December 31. Each 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 reporting period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6650(c)(1)-(c)(6) and (e)-(e)(12) and PTI P0104773]

(4) The permittee must report all deviations as defined in Subpart ZZZZ of 40 CFR 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6650(f) and PTI P0104773]

(5) 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: OAC rule 3745-77-07(C)(1), Table 7 of Subpart ZZZZ and PTI P0104773]

(6) The permittee shall submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4245(d) and PTI P0104773]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

NO_x emissions shall not exceed 3.66 lbs/hr and 16.0 tpy

Applicable Compliance Method:

Compliance with the short term limitation shall be demonstrated by multiplying the vendor provided emission factor (1.54E-03 lb/hp-hr) by the rated capacity of the engine (2,370 hp).

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (3.66 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0104773]

b. Emission Limitation:

CO emissions shall not exceed 1.0 lb/hr and 4.4 tpy

Applicable Compliance Method:

Compliance with the short term limitation shall be demonstrated by multiplying the vendor provided emission factor (2.75 g/hp-hr) by the rated capacity of the engine (2,370 hp), by the conversion factor (1 lb/453.59 gram) and by the vendor guaranteed control efficiency (1-0.93).

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (1.0 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0104773]

c. Emission Limitation:

VOC emissions shall not exceed 0.95 lb/hr and 4.16 tpy

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the VOC emission factor (0.118 lb/mmBtu) by the rated capacity of the engine (16.02 mmBtu/hr) and by the typical minimal control efficiency of an oxidation catalyst (1-0.50). The VOC emission factor was obtained from the AP-42, Fifth Edition, Section 3.2, Table 3.2-2 (7/00).

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18 or 25/25A, as appropriate.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.95 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0104773]

d. Emission Limitation:

PE from this emissions unit shall not exceed 0.99 lb/hr and 4.34 tpy

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the OAC rule 3745-17-11(B)(5)(b) rule limitation (0.062 lb/mmBtu) by the rated capacity of the engine (16.02 mmBtu/hr).

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.99 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

e. Emission Limitation:

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0104773]

f. Emission Limitation:

Visible PE from any stack 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 the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

g. Emission Limitation:

The permittee shall comply with the following emission limitations:

NO_x emissions shall not exceed 2.0 grams/HP-hr or 160 ppmvd at 15% oxygen.

CO emissions shall not exceed 4.0 grams/HP-hr or 540 ppmvd at 15% oxygen.

VOC emissions shall not exceed 1.0 gram/HP-hr or 86 ppmvd at 15% oxygen.

Applicable Compliance Method:

Compliance shall be demonstrated based upon an emissions test performed in accordance with the methods and procedures specified in f)(2) through f)(6).

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

h. Emission Limitation:

The permittee shall reduce CO emissions by 93% or more at 100% load (+/- 10%).

Applicable Compliance Method:

Compliance shall be demonstrated based upon an emissions test performed in accordance with the methods and procedures specified in f)(7) through f)(14).

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

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the emission limitations identified in 40 CFR Part 60, Subpart JJJJ in accordance with the following requirements:

a. Testing shall be conducted every 8,760 hours of operation or 3 years, whichever comes first.

b. Three separate test runs for each performance test is required, as specified in 40 CFR 60.8(f) and each test run must last at least 1 hour.

c. Each performance test must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 to Part 60, Subpart JJJJ.

d. Performance tests cannot be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c).

e. The following test method(s) shall be employed, in accordance with Table 2 of Subpart JJJJ of Part 60, to demonstrate compliance with the allowable mass emission rates:

i. Method 1 or 1A of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to select the sampling port location and the number of traverse points.

ii. Method 2 of 40 CFR Part 60, Appendix A or Method 19 of 40 CFR Part 60, Appendix A to determine the exhaust flowrate of the engine.

iii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O_2 at the exhaust stack.

iv. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the exhaust stack.

v. Methods 7, 7A, 7C, 7D, or 7E, of 40 CFR Part 60, Appendix A to measure NO_x at the exhaust stack.

vi. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM Method D6522-00; or ASTM D 6348-03 to measure CO at the exhaust stack.

vii. Method 25A of 40 CFR Part 60, Appendix A; or Method 18 of 40 CFR Part 60, Appendix A; or ASTM D6348.03 to measure VOC at the exhaust stack.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA (alternative methods allowed per footnote to Table 2 of subpart).

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office refusal to accept the results of the emission test(s).

g. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

(3) To determine compliance with the NO_x mass per unit output emission limitation, the concentration of NO_x in the engine exhaust (in ppmv) shall be converted to grams/horsepower-hour (g/hp-hr) using the following equation:

$ER = (C_d \times 1.912 \times 10^{-3} \times Q \times T) / hp\text{-}hr$

where:

ER = Emission rate of NO_x in g/hp-hr;
C_d = Measured NO_x concentration, in ppmv;
1.912×10^{-3} = Conversion constant for ppm NO_x to g/scm at 20°C;
Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, horsepower-hour.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

(4) To determine compliance with the CO mass per unit output emission limitation, the concentration of CO in the engine exhaust (in ppmv) shall be converted to g/hp-hr using the following equation:

$ER = (C_d \times 1.164 \times 10^{-3} \times Q \times T) / HP\text{-}hr$

where:

ER = Emission rate of CO in g/hp-hr;

Cd= Measured CO concentration in ppmv;
1.164×10^{-3} = Conversion constant for ppm CO to g/scm at 20°C;
Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, in horsepower-hour.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

(5) If using Method 25A, to determine compliance with the VOC mass per unit output emission limitation, the concentration of VOC in the engine exhaust (in ppmv) shall be converted to g/hp-hr using the following equation:

$ER= (C_d \times 1.833 \times 10^{-3} \times Q \times T) / hp\text{-}hr$

where:

ER = Emission rate of VOC in g/hp-hr (emissions of formaldehyde should be excluded);
Cd= VOC concentration measured as propane in ppmv;
1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to g/scm at 20°C;
Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, in horsepower-hour.

[Authority for term: OAC rules 3745-77-07(C)(1) and PTI P0104773]

(6) If using Method 18 of Part 60 or Method 320 of Part 63, to determine compliance with the VOC mass per unit output emission limitation, the measured VOC emissions can be corrected to account for the potential differences in measured values between these methods and Method 25A.

The results from Method 18 can be corrected for response factor differences using the following equation:

$RF_i = C_{Mi} / C_{Ai}$

where:

RFi= Response factor of compound i when measured with EPA Method 25A;
C_{Mi} = Measured concentration of compound i in ppmv as carbon; and
C_{Ai} = True concentration of compound i in ppmv as carbon.

The results from Method 320 can be corrected for response factor differences using the following equation:

$Ci_{corr} = RF_i \times Ci_{meas}$

where:

Ci_{corr}= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon; and
Ci_{meas}= Concentration of compound i measured by EPA Method 320, ppmv as carbon.

The corrected VOC concentration can then be placed on a propane basis using the following equation:

$CPeq = 0.6098 \times Ci_{corr}$

where:

CPeq= Concentration of compound i in mg of propane equivalent per dscm.

[Authority for term: OAC rules 3745-77-07(C)(1), 40 CFR 60.4244, 40 CFR 60.4243(b) and PTI P0104773]

(7) The permittee shall conduct, or have conducted, performance testing for this emissions unit in accordance with the following requirements to demonstrate compliance with the requirements in 40 CFR Part 63, Subpart ZZZZ:

a. The initial performance testing shall be conducted within 180 days of initial startup. Subsequent performance tests shall be conducted semiannually. After demonstrating compliance for two consecutive tests, the frequency of subsequent tests may be reduced to annually. If the results of any subsequent annual performance test indicate that the emissions unit is not in compliance with the CO emission limitation, or if there is a deviation from any operating limitation, semiannual performance tests must be resumed.

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).

c. The performance testing shall be conducted to determine the CO 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 450°F and 1350°F.

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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6610(a), 63.6645(e), 63.6600(a), 63.6640(b), Tables 1(a)&1(b) to Subpart ZZZZ and PTI P0104773]

(8) The testing shall be conducted as follows:

a. Measure the O_2 at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to ASTM D6522-00 (incorporated by reference, see

40 CFR 63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration. Methods 3A and 10 may also be used as options to ASTM D6522-00.

b. Measure the CO at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to ASTM D6522-00 (incorporated by reference, see 40 CFR 63.14). The CO concentration must be at 15% O_2, dry basis. Methods 3A and 10 may also be used as options to ASTM D6522-00.

NOTE: A copy of ASTM D6522-00 may be obtained from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959, or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6610(a), Table 4 to Subpart ZZZZ and PTI P0104773]

(9) Each performance test must be conducted according to the requirements in 40 CFR Part 63.7(e)(1) and under the specific conditions in f)(3). The test must be conducted at any load conditions within (+/- 10%) of 100% load.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(b) and PTI P0104773]

(10) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(c) and PTI P0104773]

(11) 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: OAC rule 3745-77-07(C)(1), 40 CFR 63.5520(d) and PTI P0104773]

(12) The following equation must be used to determine compliance with the percent reduction requirement:

$((Ci - Co) / Ci) \times 100 = R$

where:

Ci = concentration of CO at the control device inlet;
Co = concentration of CO at the control device outlet; and
R = percent reduction of CO emissions.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(e)(1) and PTI P0104773]

(13) The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% O_2, or an equivalent $\%CO_2$. If pollutant concentrations are to be corrected to 15% O_2 and CO_2 concentration is measured in lieu of O_2 concentration

measurement, a carbon dioxide correction factor is needed. Calculate the CO_2 correction factor as described below.

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

Fo = 0.209 Fd / Fc

where:

Fo = fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at 0% excess air;
0.209 = fraction of air that is O_2, %/100;
Fd = ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J (dscf/mmBtu); and
Fc = ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J (dscf/ mmBtu).

b. Calculate the CO_2 correction factor for correcting measurement data to 15% O_2 as follows:

$Xco_2 = 5.9 / Fo$

where:

Xco_2 = CO_2 correction factor, %; and
5.9 = 20.9% O_2 - 15% O_2, the defined O_2 correction value, %

c. Calculate the NO_x and SO_2 gas concentrations adjusted to 15% O_2 using CO_2 as follows:

$Cadj = Cd\ (Xco_2 / \%CO_2)$

where:

% CO_2 = measured CO_2 concentration measured, dry basis, %.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(e)(1), 63.6620(e)(2) and PTI P0104773]

(14) 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 accuracy in percentage of true value must be provided.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.6620(i) and PTI P0104773]

g) Miscellaneous Requirements

(1) None.

4. B014, Engine #7: Spark Ignition (SI) Internal Combustion Engine (ICE)

Operations, Property and/or Equipment Description:

2,370 hp 4SLB: CAT 3608 w/catalyst

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Nitrogen oxides (NO_x) emissions shall not exceed 11.42 tpy.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Compliance with the applicable requirements of 40 CFR Part 60, Subpart JJJJ. Carbon monoxide (CO) emissions shall not exceed 0.72 lb/hr and 3.15 tpy. Volatile organic compounds (VOC) emissions shall not exceed 1.05 lbs/hr and 4.61 tpy. Particulate emissions (PE) shall not exceed 1.10 lbs/hr and 4.84 tpy. See b)(2)a.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.
d.	OAC rule 3745-18-06(A)	Stationary ICE that burn only natural gas are exempt from the requirements of OAC rule 3745-18-06.
e.	OAC rule 3745-17-07(A)(1)	Visible PE from the exhaust stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
g.	40 CFR Part 60, Subpart JJJJ In accordance with 40 CFR 60.4230, this emissions unit is subject to the NSPS for Stationary SI ICE. 40 CFR 60.4233(e) 40 CFR 60.4231(e)-mfg. Table 1 to Part 60, Subpart JJJJ	The exhaust emissions from this engine shall not exceed: 1.0 g/hp-hr or 82 ppmvd at 15% O_2 of NO_x 2.0 g/hp-hror 270 ppmvd at 15% $O_2$of CO 0.7 g/hp-hr or 60 ppmvd at 15% $O_2$of VOC
h.	40 CFR Part 63, Subpart ZZZZ 40 CFR 63.6590(c)(1)	A new or reconstructed area source operating in compliance with 40 CFR Part 60, Subpart JJJJ is the demonstration of compliance for 40 CFR Part 63, Subpart ZZZZ.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than 10 tpy. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1. 2006 version of OAC rule 3745-31-05 as part of the SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, CO and VOC from this emissions unit since the controlled potential to emit for each is less than 10 tpy.

c) Operational Restrictions

(1) The stationary SI ICE shall be installed, maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall operate and maintain the stationary SI ICE to achieve the emission standards identified in 40 CFR 60.4233(e) and found in Table 1 of NSPS Subpart JJJJ over the entire life of

the engine. The air-to-fuel ratio controllers shall be set to ensure proper operation of the engine and control device and to minimize emissions.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.4234, 40 CFR 60.4243(b)(2), 40 CFR 60.4243(g) and PTI P0120468]

(2) During emergency conditions the permittee may operate this engine using propane for a maximum of 100 hours/year as an alternative fuel and if records are maintained for such use. If the engine is not certified to burn propane the permittee shall conduct a performance test to demonstrate compliance with the emission standards in 40 CFR 60.4233.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.4243(e) and PTI P0120468]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain a record of the natural gas burned in this ICE during each calendar year. The natural gas usage can be calculated at the end of each year using the best method available to estimate the annual throughput, which might include but shall not be limited to: readings from the facility's natural gas meter, the facility's natural gas bill, the recorded or estimated hours of operation along with the manufacture's documentation on the maximum natural gas fuel flow rate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(2) The permittee shall maintain the following records and make them available upon request:

a. all notifications submitted to comply with and all documentation supporting compliance with 40 CFR Part 60, Subpart JJJJ; and

b. the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2).

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4245(a) and PTI P0120468]

(3) The permittee shall demonstrate compliance as follows:

a. keep a maintenance plan and the records of all maintenance conducted on the engine;

b. maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and

c. conduct an initial performance test, as specified in 40 CFR 60.4244, within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4233(e) and PTI P0120468]

e) Reporting Requirements

(1) The permittee shall submit notifications as required in 40 CFR Parts 60.7(a)(1) and 60.4245(c). Results from performance testing shall be submitted in accordance with Section f)(2) and the standard terms and conditions in Section A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

1.0 g/hp-hr of NO_x or 82 ppmvd at 15% O_2

NO_x emissions shall not exceed 11.42 tpy.

Applicable Compliance Method:

Compliance with the g/hp-hr or ppmvd limit shall be demonstrated by the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to 40 CFR Part 60, Subpart JJJJ.

Compliance with the annual emission limitation shall be demonstrated by multiplying the vendor supplied emission factor (0.5 g/hp-hr) by the rated engine capacity (2,370 hp), and by the conversion (2.205E-03 lb/g), and by the maximum annual operating hours (8,760 hrs), and then dividing by 2,000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4233(e), 40 CFR 60.4244, Table 1 to Part 60 Subpart JJJJ and PTI P0120468]

b. Emission Limitations:

2.0 g CO/hp-hr or 270 ppmvd at 15% O_2

CO emissions shall not exceed 0.72 lb/hr and 3.15 tpy.

Applicable Compliance Method:

Compliance with the g/hp-hr or ppmvd limit shall be demonstrated by the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to 40 CFR Part 60, Subpart JJJJ.

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the vendor supplied emission factor (2.75 g/hp-hr) by the rated engine capacity (2,370 hp), by the conversion (2.205E-03 lb/g) and the vendor guaranteed control efficiency (1-0.95).

Compliance with the annual emission limitation shall be demonstrated by multiplying the CO short-term emission limitation (0.72 lb/hr) by the maximum annual hours of operation (8,760 hrs), and then dividing by 2,000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4233(e), 40 CFR 60.4244, Table 1 to Part 60 Subpart JJJJ and PTI P0120468]

c. Emission Limitations:

0.7 g VOC/hp-hr or 60 ppmvd at 15% O_2

VOC emissions shall not exceed 1.05 lbs/hr and 4.61 tpy.

Applicable Compliance Method:

Compliance with the g/hp-hr or ppmvd limit shall be demonstrated by the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to 40 CFR Part 60, Subpart JJJJ.

Compliance with the lb/hr emission limitation shall be determined by multiplying the vendor supplied emission factor (0.118 lb/mmBtu) by the rated engine capacity (17.84 mmBtu/hr) by the vendor guaranteed control efficiency (1-0.50).

Compliance with the annual emission limitation shall be demonstrated by multiplying the VOC short-term emission limitation (1.05 lbs/hr) by the maximum annual hours of operation (8,760 hrs), and then dividing by 2,000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4233(e), 40 CFR 60.4244, Table 1 to Part 60 Subpart JJJJ and PTI P0120468]

d. Emission Limitations:

0.062 lb PE/mmBtu

PE shall not exceed 1.10 lbs/hr and 4.84 tpy.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the PE emission limitation through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the OAC rule 3745-17-11(B)(5)(b) rule limitation (0.062 lb/mmBtu) by the rated engine capacity (17.84 mmBtu/hr)

Compliance with the annual emission limitation shall be demonstrated by multiplying the PE short-term emission limitation (1.10 lbs/hr) by the maximum annual hours of operation (8,760 hrs), and then dividing by 2,000 lbs/ton.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

e. Emission Limitation:

Visible PE from the exhaust stack serving this emissions unit 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 the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the emission limitations for this engine identified in 40 CFR Part 60, Subpart JJJJ. Testing shall be conducted in accordance with the following requirements:

a. Three separate test runs for each performance test is required, as specified in 40 CFR 60.8(f) and each test run must last at least 1 hour.

b. Each performance test must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 to Part 60, Subpart JJJJ.

c. Performance tests cannot be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c).

d. The following test method(s) shall be employed, in accordance with Table 2 of Subpart JJJJ of Part 60, to demonstrate compliance with the allowable mass emission rates:

i. Method 1 or 1A of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to select the sampling port location and the number of traverse points.

ii. Method 2 of 40 CFR Part 60, Appendix A or Method 19 of 40 CFR Part 60, Appendix A to determine the exhaust flowrate of the engine.

iii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O_2 at the exhaust stack.

iv. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the exhaust stack.

v. Methods 7, 7A, 7C, 7D, or 7E, of 40 CFR Part 60, Appendix A to measure NO_x at the exhaust stack.

vi. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM Method D6522-00; or ASTM D 6348-03 to measure CO at the exhaust stack.

vii. Method 25A of 40 CFR Part 60, Appendix A; or Method 18 of 40 CFR Part 60, Appendix A; or ASTM D6348.03 to measure VOC at the exhaust stack.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA (alternative methods allowed per footnote to Table 2 of subpart).

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(3) To determine compliance with the NO_x mass per unit output emission limitation, the concentration of NO_x in the engine exhaust (in ppmv) shall be converted to grams/horsepower-hour (g/hp-hr) using the following equation:

$ER = (C_d \times 1.912 \times 10^{-3} \times Q \times T) / hp\text{-}hr$

where:

ER = Emission rate of NO_x in g/hp-hr;
C_d= Measured NO_x concentration, in ppmv;
1.912×10^{-3} = Conversion constant for ppm NO_x to g/scm at 20°C;

Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, horsepower-hour.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(4) To determine compliance with the CO mass per unit output emission limitation, the concentration of COin the engine exhaust (in ppmv) shall be converted to g/hp-hr using the following equation:

$ER = (C_d \times 1.164 \times 10^{-3} \times Q \times T) / HP\text{-}hr$

where:

ER = Emission rate of CO in g/hp-hr;
Cd= Measured CO concentration in ppmv;
1.164×10^{-3} = Conversion constant for ppm CO to g/scm at 20°C;
Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, in horsepower-hour.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(5) If using Method 25A, to determine compliance with the VOC mass per unit output emission limitation, the concentration of VOC in the engine exhaust (in ppmv) shall be converted to g/hp-hr using the following equation:

$ER = (C_d \times 1.833 \times 10^{-3} \times Q \times T) / hp\text{-}hr$

where:

ER = Emission rate of VOC in g/hp-hr (emissions of formaldehyde should be excluded);
Cd= VOC concentration measured as propane in ppmv;
1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to g/scm at 20°C;
Q = Stack gas volumetric flow rate, in dscm/hr;
T = Time of test run, in hours; and
hp-hr = Brake work of the engine, in horsepower-hour.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0120468]

(6) If using Method 18 of Part 60 or Method 320 of Part 63, to determine compliance with the VOC mass per unit output emission limitation, the measured VOC emissions can be corrected to account for the potential differences in measured values between these methods and Method 25A.

The results from Method 18 can be corrected for response factor differences using the following equation:

$RF_i = C_{Mi} / C_{Ai}$

where:

RFi= Response factor of compound i when measured with EPA Method 25A;
C_{Mi} = Measured concentration of compound i in ppmv as carbon; and
C_{Ai} = True concentration of compound i in ppmv as carbon.

The results from Method 320 can be corrected for response factor differences using the following equation:

$Ci_{corr} = RF_i \times Ci_{meas}$

where:

Ci_{corr}= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon; and
Ci_{meas}= Concentration of compound i measured by EPA Method 320, ppmv as carbon.

The corrected VOC concentration can then be placed on a propane basis using the following equation:

$CPeq = 0.6098 \times Ci_{corr}$

where:

CPeq= Concentration of compound i in mg of propane equivalent per dscm.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.4244, 40 CFR 60.4243(b) and PTI P0120468]

g) Miscellaneous Requirements

(1) None.

5. P019, Fugitive VOCs

Operations, Property and/or Equipment Description:

Fugitive emissions from equipment leaks

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	No applicable rules	

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. None.

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group -Engines: B001, B002, B003: 2-Stroke Lean Burn Spark Ignition Engines

EU ID	Operations, Property and/or Equipment Description
B001	1,500 horsepower Clark Model No. TRA-8
B002	1,500 horsepower Clark Model No. TRA-8
B003	1,500 horsepower Clark Model No. TRA-8

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-06(A)	Stationary internal combustion engines (ICE) that burn only natural gas are exempt from the requirements of OAC rule 3745-18-06. See c)(1).
d.	40 CFR Part 63, Subpart ZZZZ 63.6590(b)(3)	See b)(2)a.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR 63.6590(b)(3)(i), because emissions units B001, B002 and B003 are existing spark ignition 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, these emissions units are not required to comply with 40 CFR Part 63, Subparts A and ZZZZ, including initial notification requirements.

c) Operational Restrictions

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

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

d) Monitoring and/or Recordkeeping 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)]

e) 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)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from any stack 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 the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rules 3745-77-07(C)(1)]

b. Emission Limitation:

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

g) Miscellaneous Requirements

(1) None.

7. Emissions Unit Group -Heaters: B006, B007, B008, B011: natural gas-fired boilers

EU ID	Operations, Property and/or Equipment Description
B006	10 mmBtu/hr; 50/50 water/ethylene glycol used to heat gas stream
B007	10 mmBtu/hr; 50/50 water/ethylene glycol used to heat gas stream
B008	10 mmBtu/hr; 50/50 water/ethylene glycol used to heat gas stream
B011	12 mmBtu/hr; 50/50 water/ethylene glycol used to heat gas stream

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI P0107507: B006-B008] [PTI P0104906: B011]	**For emissions units B006, B007 and B008:** Nitrogen oxides (NO_x) emissions shall not exceed 1.0 lb/hr and 4.4 tpy. Carbon monoxide (CO) emissions shall not exceed 0.8 lb/hr and 3.7 tpy. **For emissions unit B011:** NO_x emissions shall not exceed 1.1 lbs/hr and 4.8 tpy. CO emissions shall not exceed 0.9 lb/hr and 4.0 tpy.
b.	OAC rule 3745-18-06(A)	Fuel burning equipment that burns only natural gas is exempt from the requirements of OAC rule 3745-18-06. See c)(1).
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu of actual heat input.
d.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
e.	40 CFR Part 63, Subpart DDDDD	Table 3 to 40 CFR Part 63, Subpart DDDDD – Work Practice Standards [40 CFR

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[40 CFR 63.7480-7575] National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters [In accordance with 40 CFR 63.7499 and 63.7575, these emissions units are existing process heaters designed to burn gas 1 subcategory fuel subject to the work practices specified in this section.]	63.7500]. See B.4, c)(2), d)(2) and e)(2). Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 13, 2016, except as provided in 40 CFR 63.6(i).
f.	40 CFR Part 63.1 – 63.16 [40 CFR 63.7565]	Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

a. The permittee is required to comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD and 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 10 of 40 CFR Part 63, Subpart DDDDD.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1), PTI P0104906 and PTI P0107507]

(2) The permittee shall comply with the applicable work practices required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7500, 63.7515(d), 63.7540(a)(10) and (13), and Table 3 to Subpart DDDDD	Annual tune-up requirements.
63.7500(a)(3)	General duty to minimize emissions.
63.7510(e) and Table 3 to Subpart DDDDD	Initial compliance requirements, including an initial tune-up and one-time energy assessment.

[Authority for term: 40 CFR Part 63 Subpart DDDDD]

d) Monitoring and/or Recordkeeping 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), PTI P0104906 and PTI P0107507]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7555(a) and (h)	Required overall records to be maintained.
63.7560	Record format and retention requirements.

[Authority for term: 40 CFR Part 63 Subpart DDDDD]

e) 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), PTI P0104906 and PTI P0107507]

(2) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7530(e) and (f) and 63.7545	Notification of Compliance Status requirements.
63.7550 and Table 9 to Subpart DDDDD	Content and submission of compliance reports.

[Authority for term: 40 CFR Part 63 Subpart DDDDD]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitations</u>:

For emissions units B006, B007 and B008, NO_x emissions shall not exceed 1.0 lb/hr and 4.4 tpy.

For emissions unit B011, NO_x emissions shall not exceed 1.1 lbs/hr and 4.8 tpy.

Applicable Compliance Method:

For emissions units B006, B007 and B008, compliance with the hourly emission limitation shall be demonstrated by multiplying the NO_x emission factor (100 lbs/mmcf) by the rated capacity of the boiler (10,000 scf/hr), and then dividing by 1,000,000 cf/mmcf. The NO_x emission factor was obtained from AP-42, Chapter 1.4, Table 1.4-1 (7/98).

For emissions unit B011, compliance with the hourly emission limitation shall be demonstrated by multiplying the vendor supplied emission factor (9.14 E-02 lb/mmBtu) by the rated capacity of the boiler (12 mmBtu/hr).

The tpy emission limitation for each boiler was developed by multiplying the appropriate short-term allowable NO_x emission limitation (1.0 or 1.1 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI P0104906 and PTI P0107507]

b. Emission Limitations:

For emissions units B006, B007 and B008, CO emissions shall not exceed 0.8 lb/hr and 3.7 tpy.

For emissions unit B011, CO emissions shall not exceed 0.9 lb/hr and 4.0 tpy.

Applicable Compliance Method:

For emissions units B006, B007 and B008, compliance with the hourly emission limitation shall be demonstrated by multiplying the CO emission factor (84 lbs/mmscf) by the rated capacity of the boiler (10,000 scf/hr), and then dividing by 1,000,000 cf/mmcf. The CO emission factor was obtained from AP-42, Chapter 1.4 Table 1.4-1 (7/98).

For emissions unit B011, compliance with the hourly emission limitation shall be demonstrated by multiplying the vendor supplied emission factor (7.62 E-02 lb/mmBtu) by the rated capacity of the boiler (12 mmBtu/hr).

The tpy emission limitation for each boiler was developed by multiplying the appropriate short-term allowable CO emission limitation (0.8 or 0.9 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI P0104906 and PTI P0107507]

c. Emission Limitation:

PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon the emission factor for filterable PM (1.9 lb/mmscf) divided by 1,020 mmBtu/mmscf.

The PE emission factor was obtained from AP-42, Chapter 1.4, Table 1.4-2 (7/98).

[Authority for term: OAC rule 3745-77-07(C)(1), PTI P0104906 and PTI P0107507]

d. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1), PTI P0104906 and PTI P0107507]

g) Miscellaneous Requirements

(1) None.