Ohio Environmental Protection Agency

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

10/12/2016

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: CRAWFORD COMPRESSOR STATION
Facility ID: 0123000137
Permit Type: Renewal
Permit Number: P0109255

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. 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. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA DAPC, Central District Office

PROPOSED

Division of Air Pollution Control
Title V Permit
for
CRAWFORD COMPRESSOR STATION

Facility ID:	0123000137
Permit Number:	P0109255
Permit Type:	Renewal
Issued:	10/12/2016
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
CRAWFORD COMPRESSOR STATION

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Ohio Environmental Protection Agency

Authorization

Facility ID:	0123000137
Facility Description:	Compressor Station
Application Number(s):	A0012665, A0012666, A0043462
Permit Number:	P0109255
Permit Description:	Title V Renewal Permit of Compressor Station includes Prime Mover Recip Engines, Dehydrators, Generators, and Glycol Reclaimers.
Permit Type:	Renewal
Issue Date:	10/12/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance

Superseded Permit Number: P0082373

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

CRAWFORD COMPRESSOR STATION
Environmental Health and Safety
1700 MacCorkle Avenue, S.E.
Greenfield Twp., OH 25314

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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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, Central 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 following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage Facilities:

   B013 - TEG Dehydration Unit No.1;
   B026 - TEG Dehydration Unit No.2; and
   B032 - TEG Dehydration Unit No.3.

   The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://efcr.gpoaccess.gov (http://efcr.gpoaccess.gov/) or by contacting Ohio EPA, Central District Office.

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines:

   B019 - Reciprocating Engine/Integral Compressor No. 09902;
   B020 - Reciprocating Engine/Integral Compressor No. 09903;
   B024 - Emergency Generator No. 099G1;
   B025 - Emergency Generator No. 099G3;
   B027 - Reciprocating Engine/Air Compressor No. 099A1; and
   B034 - Reciprocating Engine/Integral Compressor No. 099G2.

   The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://efcr.gpoaccess.gov (http://efcr.gpoaccess.gov/) or by contacting Ohio EPA, Central District Office.

4. The following emissions units contained in the permit are subject to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters:

   a) Affected Sources:

      (1) According to 63.7485, 63.7490 and 63.7499, emissions units B003, B014, B030, B031, and B033 are existing affected sources located at a major source subject to the requirements for a boilers designed to burn natural gas with a heat input less than 10 MMBtu. These are affected sources under the final Boiler MACT rule promulgated on March 21, 2011 as amended on January 31, 2013 (40 CFR Part 63, Subpart DDDDD) subject to work practice standards specified in 40 CFR 63.7540 with a compliance date of January 31, 2016. The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://efcr.gpoaccess.gov (http://efcr.gpoaccess.gov/) or by contacting Ohio EPA, Central District Office.

b) Applicable Emission Limitations and /or Control Requirements

63.7500(a)(1) and Table 3	Work practice standards required
63.7500(a)(3)	Operating and maintaining source
63.7500(b)	Approval or alternative work practice standards
63.7565 and Table 10	General Provisions

c) Operational Restrictions

63.7510(e)	Initial compliance demonstration date
63.7515(e)	Biennial tune-up work practice every 25 months

d) Monitoring and Recordkeeping Requirements

63.7540(a)(11) and (12)	Compliance demonstration for work practice standards
63.7555(a)	Records retention
63.7560	Record format and retention

e) Reporting Requirements

63.7530(d)	Reserved
63.7530(e)	Notification of Compliance Status for energy assessment
63.7530(f)	Notification of Compliance Status for initial compliance demonstration requirements
63.7545(a)	Submit notifications to delegated authority
63.7545(b)	Initial Notification date for existing sources
63.7545(e)	Notification of Compliance Statue report date and content
63.7545(f)	Notification of alternative fuel use
63.7550 and Table 9	Reporting schedule and content

63.7495(d)	Comply by submitting notifications according to schedule

f) Miscellaneous Requirements

63.7490	What is an affected source?
63.7495(b)	When do I have to comply with this subpart?
63.7575	Definitions for this subpart

5. 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:

Emission Unit ID	Emission Unit Description	Permits
B003	Boiler No. 1. – Kewanee 8560, 8.2 mmBtu/hr Heating System	Installed prior to 1974. Placed on Registration January 31, 1977.
B030	Boiler – Kewanee 8560, 8.2 mmBtu/hr Heating System Boiler No. 2.	Installed prior to 1974. No PTO or Registration issued.
B031	Line Heater No. 2 - NATCO T-1372 207 01. Heat Input: 6.0 mmBtu/hr.	Installed prior to 1974. No PTO or Registration issued.
B033	Line Heater No. 3 – Mfr. ETI, Model No. BAP – 1000. Heat Input: 11.4 mmBtu/hr.	Permit-by-rule, PBR 06261, issued November 20, 2008.

C. Emissions Unit Terms and Conditions

1. B004, Recip Engine/Integral Compr #09912

Operations, Property and/or Equipment Description:

4SLB Delaval HVC-12, Recip Engine COMPR #09912, 3,300 Brake HP, Product Rating 3000HP.

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)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-06(G)	See b)(2)a. below.
d.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. 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. Therefore, the unit do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 63, Subpart A, including the initial

notification requirements specified in 40 CFR 63.6645(d). The facility is identified as a major source for HAPs.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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 particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

b. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

2. B005, Recip Engine /Integral Compr #09913

Operations, Property and/or Equipment Description:

2SLB Cooper-Bessemer 8W-330C, Recip Engine COMPR #09913, 4,400 Brake HP, Product Rating 4000HP.

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 No. 01-364, as issued 1/20/1981)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B)(5)(b).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)a. below.
e.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. This emissions unit is an 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. Therefore, the unit do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 63, Subpart A, including the initial notification requirements specified in 40 CFR 63.6645(d). The facility is identified as a major source for HAPs.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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 particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

b. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-1 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

3. B010, Recip Engine/Integral Compr #09914

Operations, Property and/or Equipment Description:

2SLB Cooper-Bessemer 10W-330C, Recip Engine COMPR #09914, 5,500 Brake HP, Product Rating 5000HP.

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 No. 01-379, as issued 4/13/1981)	Emissions shall not exceed: 5 grams / hp-hr of nitrogen oxide (NOx), 0.3 gram / hp-hr of volatile organic compound (VOC), and 2 grams / hp-hr of carbon monoxide (CO).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)a. below.
e.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. This emissions unit is an 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. Therefore, the unit do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 63, Subpart A, including the initial notification requirements specified in 40 CFR 63.6645(d). The facility is identified as a major source for HAPs.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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. <u>Emission Limitation:</u>

5 grams / hp-hr of NOx.

Applicable Compliance Method:

This performance standard was established as BAT in PTI No. 01-379, as issued 4/13/1981. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

0.3 gram / hp-hr of VOC.

Applicable Compliance Method:

This performance standard was established as BAT in PTI No. 01-379, as issued 4/13/1981. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

2 grams / hp-hr of CO.

Applicable Compliance Method:

This performance standard was established as BAT in PTI No. 01-379, as issued 4/13/1981. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-1 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

4. B013, TEG Dehydration Unit No.1

Operations, Property and/or Equipment Description:

NATCO 250 mmscf/day Natural Gas Dehydrator System: Two Absorber Towers & Regenerator Still including a 0.35 mmBtu/hr NATCO Reboiler (BLR3) and 1.15 mmBtu/hr NAO flare (FLLP1). TEG Dehy No. 1.

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) (P0116355, as issued 4/14/2014)	Emissions shall not exceed: 0.0862 lb/hr and 0.005 TPY of sulfur dioxide (SO_2), 0.86 lb/hr and 3.78 TPY of volatile organic compounds (VOC), 0.11 lb/hr and 0.48 TPY of nitrogen oxide (NOx), 0.45 lb/hr and 1.97 TPY of carbon monoxide (CO), and 0.003 lb/hr and 0.013 TPY of particulate (PM) emissions.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the boiler stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the boiler stack shall not exceed 0.020 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)f. below.
e.	40 CFR Part 63, Subpart A (National Emission Standards for	See b)(2)g. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Hazardous Air Pollutants: General Provisions)	
f.	40 CFR Part 63, Subpart HHH (National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage)	In accordance with 40 CFR 63.1275 and 40 CFR 63.1281, the small glycol dehydration unit at a major source of HAP shall be limited to emissions of benzene, toluene, ethyl benzene, and xylene (BTEX) as determined in Equation 1 for existing units in 40 CFR 63.1275(b)(1)(iii).
g.	40 CFR 63.1275(c)(1)	As an alternative, the process vent(s) from the glycol dehydration unit(s) may be connected to a process natural gas line through a closed vent system. See b)(2)h. and i.
h.	40 CFR 63.1282(d)(2) and 40 CFR 63.11(b)(4)	There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation.

(2) Additional Terms and Conditions

a. The emissions unit shall be equipped with a flare to control organic compound emissions. The flare shall be fired with natural gas.

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

b. The flare shall be designed and operated in a manner that will ensure no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, as determined by Method 22 referenced in 40 CFR 60.18 (f).

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

c. The flare shall be operated at all times when organic compound emissions may be vented to it.

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

d. The flare shall be used only when the net heating value of the gas being combusted is 200 Btu/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f).

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

e. The flare shall be designed with an exit velocity that satisfies the requirements of 40 CFR 60.18(f).

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

f. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

g. Table 2 to Subpart HHH of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart HHH of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

h. For each existing small glycol dehydration unit, installed on or before 8/23/11, BTEX emissions shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii). If no control device is needed to comply with the BTEX limit, compliance is demonstrated as specified in 40 CFR 63.1282(c)(2).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1275(b)(1)(iii), and 40 CFR 63.1275(c)(3)(iii))

i. The BTEX emission limit may be met through the use of one of the following methods:

i. connecting the process vent(s) of the glycol dehydration unit(s) through a closed vent system designed and operated in accordance with 40 CFR 63.1281(c), to a control device(s) designed and operated in accordance with 40 CFR 63.1281(f);

ii. process modifications meeting the requirements of 40 CFR 63.1281(e); or

iii. using a combination of process modifications and control device(s) meeting the requirements of 40 CFR 63. 1281(f) and closed vent system meeting the requirements of 40 CFR 63.1281(c); or

iv. demonstrate that the BTEX emissions limit is met through actual uncontrolled operation of the small glycol dehydration unit.

Operational parameters shall be documented in accordance with the requirements specified in 40 CFR 63.1283(d) and the BTEX emissions determined in accordance with the requirements specified in 40 CFR 63.1282(a)(2).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1275(b)(1)(iii)(A) through (D))

j. The control device for small glycol dehydration units used to meet BTEX the emission limit calculated in 40 CFR 63.1275(b)(1)(iii) shall be one of the following:

i. An enclosed combustion device (e.g., thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) that is designed and operated to meet the levels specified below:

(a) The mass content of BTEX in the gases vented to the device is reduced as determined in accordance with the requirements of 40 CFR 63.1282(d).

(b) The concentration of either TOC or total HAP in the exhaust gases at the outlet of the device is reduced to a level equal to or less than 20 parts per million by volume on a dry basis corrected to 3 percent oxygen as determined in accordance with the requirements of 40 CFR 63.1282(e).

If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

ii. A vapor recovery device (e.g., carbon adsorption system or condenser) or other non-destructive control device that is designed and operated to reduce the mass content of BTEX in the gases vented to the device as determined in accordance with the requirements of 40 CFR 63.1282(d).

iii. A flare, as defined in 40 CFR 63.1271, that is designed and operated in accordance with the requirements of 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(f)(1))

k. Where using a flare, as defined in 40 CFR 63.1271, for compliance, there shall be no visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours; and the compliance determination shall be conducted using Method 22 of CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(d)(2), 40 CFR 63.1281(f)(1)(iii), and 40 CFR 63.11(b)(4))

l. The permittee shall prepare a site-specific monitoring plan for each continuous parameter monitoring system (CPMS), required for compliance, that addresses the monitoring system design, data collection, quality assurance, and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d). Each CPMS shall be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan; and the permittee shall conduct a performance evaluation of each CPMS in accordance with the

site-specific monitoring plan. Performance checks, system accuracy audits, or other audits required by the plan shall be conducted at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1283(d)(1)(ii))

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))

Applicable Rule	Requirement
40 CFR 63.1275 and 40 CFR 63.1281(c) and (f)	Design and operational requirements for a closed-vent system and the control device used to comply with 40 CFR 63.1274(c)(1).
40 CFR 63.1281(c)(3); and 40 CFR 63.1283(c)(2)(iii)	Each bypass device to a closed-vent system meeting the requirements of 40 CFR 63.1281(c) must be installed with a flow indicator which takes a reading once every 15 minutes and is installed with an alarm (for any bypass); or must install a car-seal or lock-and–key mechanism on the bypass device to maintain the bypass valve in a closed position.
40 CFR 63.1281(f)(1)(iii); and 40 CFR 63.1282(d)(2).	A flare, used to demonstrate compliance with 40 CFR 63.1275(b)(1)(iii), must be designed and operated in accordance with 40 CFR 63.11(b).
40 CFR 63.1281(f)(1)(ii)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with 40 CFR 63.1282(f) and the performance test conducted in accordance with 63.1282(d).
40 CFR 63.1281(f)(1)(ii), (d)(4), and (d)(5)	A carbon adsorber used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the performance test conducted in accordance with 63.1282(d). The spent carbon must be monitored, regenerated, reactivated, or burned as required in 40 CFR 63.1281(d)(5).
40 CFR 63.1281(f)(1)(i)	A combustion device, other than a flare, used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii) or designed to

	reduce TOC or total HAP in the exhaust gases to a level equal to or less than 20 ppm by volume on a dry basis corrected to 3% O_2 as determined in accordance with 40 CFR 63.1282(d).
40 CFR 63.1281(f)(2)(i)	Each control device used to comply with Part 63 Subpart HHH shall be operated at all times emissions are vented from the glycol dehydration unit(s), and through a closed vent system as required by rule.
40 CFR 63.1274(h)	The glycol dehydration unit and any required control and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart HHH)

(2) Where the demonstration of compliance for a combustion control device is tested by the manufacturer, under the provisions of 40 CFR 63.1282(g), the permittee shall demonstrate that a control device achieves the performance requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii), by installing a device tested and certified by the manufacturer and complying with the following criteria:

a. The inlet gas flowrate shall meet the range specified by the manufacturer. Flowrate shall be calculated as specified in 40 CFR 63.1283(d)(3)(i)(H)(*1*).

b. A pilot flame shall be present at all times of operation. The pilot flame shall be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(H)(*2*).

c. Devices shall be operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour. A visible emissions test using Method 22, 40 CFR Part 60, Appendix A, shall be performed each calendar quarter. The observation period shall be 1 hour and shall be conducted according to EPA Method 22, 40 CFR Part 60, Appendix A.

d. Compliance with the operating parameter limit is achieved when the following criteria are met:

i. the inlet gas flowrate is equal to or below the maximum established by the manufacturer;

ii. the pilot flame is present at all times;

iii. during the visible emissions test performed under 40 CFR 63.1282(h)(3), the duration of visible emissions does not exceed a total of 2 minutes during the observation period.

(a) Devices failing the visible emissions test shall follow manufacturers repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation.

(b) All repairs and maintenance activities for each unit shall be recorded in a maintenance and repair log and shall be available on site for inspection.

iv. Following return to operation from maintenance or repair activity, each device must pass a Method 22 visual observation as described in 40 CFR 63.1282(h)(3).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(h), 40 CFR 63.1282(d), 40 CFR 63.1283(d)(3)(i)(H), and 40 CFR 63.1283(d)(5)(i)(C))

(3) The permittee may document the conditions for which glycol dehydration unit baseline operations shall be modified to achieve the BTEX limit determined in 40 CFR 63.1275(b)(1)(iii), either through process modifications or through a combination of process modifications and one or more control devices. If a combination of process modifications and one or more control devices are used, the permittee shall also establish the emission reduction to be achieved by the control device to meet the BTEX limit for the small glycol dehydration unit process vent. Only modifications in glycol dehydration unit operations directly related to process changes, including but not limited to changes in glycol circulation rate or glycol-HAP absorbency, shall be allowed. Changes in the inlet gas characteristics or natural gas throughput rate shall not be considered in determining the overall emission reduction due to process modifications.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(2))

(4) The permittee that meets the BTEX limit using process modifications alone shall maintain records to document that the facility continues to operate in accordance with the conditions under which the glycol dehydration unit(s) was/were demonstrated to attain the limit. The permittee that meets the BTEX limit using a combination of process modifications and one or more control devices shall also meet the control device requirements for small glycol dehydration units as identified in 40 CFR 63.1281(f) and the BTEX standard must be met.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(3))

(5) Each control device used to comply with the requirements of Part 63 Subpart HHH shall be operated at all times when gases, vapors, and fumes are vented from the glycol dehydration unit, and through the closed-vent system to the control device as required under 40 CFR 63.1275. More than one unit may be vented to a control device.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(2)(i), and 40 CFR 63.1275(b)(1)(iii))

(6) For each control device monitored to demonstrate continuous compliance in accordance with the requirements of 40 CFR 63.1283(d), the permittee shall maintain the daily average of the parameter value at either equal to or greater than the minimum or equal to or less than the maximum monitoring value established during the performance test.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(e)(3), and 40 CFR 63.1283(d)(5))

(7) For each carbon adsorption system used to demonstrate compliance with the BTEX limit, the carbon shall be monitored; and it shall be replaced or regenerated, reactivated, or burned in a thermal treatment unit, incinerator, boiler, or industrial furnace that meets the applicable requirements of the unit identified in 40 CFR 63.1281(d)(5)(ii). Carbon shall be replaced with fresh carbon on a regular predetermined time interval that is no longer than the service life of the carbon adsorption system.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(3), and 40 CFR 63.1281(d)(5))

(8) The glycol dehydration unit and any required control and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1274(h))

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))

(2) The flare shall be monitored for the presence of a pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.

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

(3) The permitttee shall record the following information each month:

a. All periods during which there was no pilot flame; and

b. The operating times for the flare, monitoring equipment, and the associated emissions unit.

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

(4) The following monitoring and recordkeeping requirements are applicable to the glycol dehydration unit(s):

	Applicable Rule	Requirement
a.	40 CFR 63.1270(a)(1)	The owner or operator of the small glycol dehydration unit shall maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year.
b.	40 CFR 63.1283(c)	Inspection requirements for a closed-vent system for a dehydration unit subject to control.

	Applicable Rule	Requirement
c.	40 CFR 63.1284(b)(5) through (8)	Records required for each inspection of the closed-vent system for a dehydration unit subject to control.
d.	40 CFR 63.1283(d)(3)(i)(C) and 40 CFR 63.1284(e)	Where a flare is used to comply with the requirements of 40 CFR 63.1274(c), it must be equipped with a continuous recorder for the thermocouple or a heat sensing monitoring device for the pilot flame. A record must be maintained of: all periods of time when the pilot flame is out when process gas is being vented to it; all required visible emission readings; the flare design; and the heat content, flowrate, and exit velocity determinations.
e.	40 CFR 63.1283(c)(2)(iii); 40 CFR 63.1283(d)(6)(iv); and 40 CFR 63.1281(c)(3)(i)	A record shall be maintained for: the flow indicator readings for each bypass device to the closed-vent system and/or a record of the monthly inspection of the car-seal/lock-and–key mechanism on the bypass device, and a record of each detected bypass.
f.	40 CFR 63.1282(b),(d),(e), and (f); and 40 CFR 63.1284(a),(b), and (e) For 40 CFR 63.1274(c)	Must maintain the records required to demonstrate compliance, i.e., leak detection results demonstrating no detectable emissions from the closed-vent system and the appropriate performance test and emission test data of the control device.
g.	40 CFR 63.1282(e) and (f); 40 CFR 63.1283(d); and 40 CFR 63.1284(b)(4)	If using an enclosed combustion or vapor recovery device to demonstrate compliance with Part 63, Subpart HHH, the maximum or minimum monitoring parameter values must be recorded and maintained in accordance with these paragraphs.
h.	40 CFR 63.1283(d)(3)(i)(E)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.
i.	40 CFR 63.1283(d)(3)(i)(F) or (G)	A carbon adsorption system used to demonstrate compliance with 40 CFR 63.1274(c)(1) must meet the monitoring and recordkeeping requirements of this paragraph.
j.	40 CFR 63.1283(d)(3)(i)(A), (B) or (D)	A combustion device used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a continuous temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.

	Applicable Rule	Requirement
k.	40 CFR 63.1282(d)(4) and 40 CFR 63.1282(f)	Where meeting the requirements of these paragraphs, a condenser design analysis may be used to comply with the control requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii).
l.	40 CFR 63.1283(d)(4)	Using the continuous data collected and recorded as required in the 40 CFR 63.1283(d)(3), the daily average value for each monitored operating parameter must be calculated for each operating day. Valid data points must be available for 75% of the operating hours each day.
m.	CFR 63.1283(d)(5)	r each operating parameter monitor installed in accordance w/ 40 CFR 63.1283(d), a minimum or maximum operating parameter must be established to define conditions at which the control device must be operated to continuously achieve the performance requirements of 40 CFR 63.1281(d)(1) or (e)(3). This paragraph also allows operating parameter values to be established based on a condenser's design analysis and the manufacturer's recommendations.
n.	CFR 63.1284(b)	e applicable records identified in 40 CFR 63.1284 and 40 CFR 63.10 and reports required by 40 CFR 63.1285 must be maintained for a period of 5 years following the date of record and they must be accessible upon request.
o.	ble 2 to Part 63, Subpart HHH	ble 2 identifies the applicable recordkeeping requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.8 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(5) Except for any part of the closed-vent system that is/are designated as unsafe or difficult to inspect (as identified in 40 CFR 63.1283(c)(5) or (6), the permittee shall conduct the following inspections for any closed vent system used to demonstrate compliance:

a. For joints, seams, or other connections that are not permanently or semi-permanently sealed, the permittee shall conduct an initial and annual inspections according to the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.

b. For joints, seams, or other connections that are permanently or semi-permanently sealed, the permittee shall conduct an initial inspection according to

the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.

c. Following any time a component that is permanently or semi-permanently sealed (e.g., a welded joint) is repaired or replaced or such a connection is unsealed, the permittee shall monitor each such joint, seam, or other component/connection according to the test methods and procedures specified in 40 CFR 63.1282(b), to demonstrate that the sealed and/or welded joint(s) or component(s) was/were repaired to meet the requirement for no detectable emissions.

A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(6) The flow indicator for each bypass device shall be set to take a reading at least once every 15 minutes at the inlet to the bypass device. If the bypass device valve is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, the seal or closure mechanism shall be visually inspected at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device. A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2)(iii), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(7) In the event that a leak or defect is detected, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown. A record of the date each leak is detected, the maximum instrument reading measured by Method 21, and the date each leak is successfully repaired shall be maintained as specified in 40 CFR 63.1284(b)(7) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(c)(3) and (4))

(8) The site-specific monitoring plan for the CPMS shall contain the following elements, unless alternative quality assurance and quality control procedures have been approved in accordance with 40 CFR 63.8(f)(4):

a. the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

b. sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

c. equipment performance checks, system accuracy audits, or other audit procedures;

d. ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); and

e. ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

The permittee shall conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(1)(ii))

(9) The permittee shall install and operate a continuous parameter monitoring system designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of 40 CFR 63.1281(f). The continuous parameter monitoring system shall meet the following specifications and requirements:

a. Each continuous parameter monitoring system shall measure data values at least once every hour and record either each measured data value or each block average value for each 1-hour period or shorter periods, calculated from all measured data values during the period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

b. The parameter monitoring system shall be installed, calibrated, operated, and maintained in accordance with the site-specific monitoring plan that addresses the monitoring system design, data collection, and quality assurance and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d).

c. The continuous monitoring device shall be equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device and specified as follows:

i. A thermal vapor incinerator, demonstrating that the combustion zone temperature is an accurate indicator of performance, shall be equipped with a temperature monitoring device with a continuous recorder and with a minimum accuracy of ±2% of the temperature being monitored in °C or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

ii. A catalytic vapor incinerator shall be equipped with a temperature monitoring device capable of monitoring temperature at two locations and have a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

iii. A flare shall be equipped with a heat sensing monitoring device that indicates the continuous ignition of the pilot flame.

iv. A boiler or process heater shall be equipped with a temperature monitoring device with a continuous recorded and with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

v. A condenser shall be equipped with a temperature monitoring device with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser. A condenser performance curve shall be used to establish the relationship between the condenser outlet temperature and condenser control efficiency.

vi. A regenerative-type carbon adsorption system shall be equipped with:

(a) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ±10%; and

(b) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle. The temperature monitoring device shall have a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater.

vii. For a nonregenerative-type carbon adsorption system, the design carbon replacement interval shall be monitored and established using a performance test conducted in accordance with 40 CFR 63.1282(d)(3); and the carbon replacement schedule shall be based on the total carbon working capacity of the control device and source operating schedule.

viii. Where using a continuous organic compound monitoring system to measure the concentration level of organic compounds in the exhaust vent stream from the control device, it must be installed, certified,

operated, and maintained in accordance with the requirements of Performance Specification 8 or 9 of Appendix B of 40 CFR Part 60 and the manufacturer's specifications.

ix. Where demonstrating compliance using a combustion control device tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall:

(a) determine the actual average inlet waste gas flowrate using the model GRI-GLTCalc™, Version 3.0 or higher, ProMax, or AspenTech HYSYS. Inputs to the models shall be representative of actual operating conditions; and

(b) install a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

d. Except for the inlet gas flowrate, the permittee shall calculate the daily average value recorded for each monitored operating parameter for each operating day. If the glycol dehydration unit operations are continuous, the operating day is a 24-hour period. If the glycol dehydration unit operations are not continuous, the operating day is the total number of hours of operation per 24-hour period. Valid data points must be available for 75% of the operating hours in an operating day to compute the daily average.

e. The minimum operating parameter value or a maximum operating parameter value shall be established based on values measured during the performance test and supplemented, as necessary, by the control device design analysis or the manufacturer's recommendations, to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of 40 CFR 63.1281(d)(1) or 63.1281(e)(3)(ii).

f. Parameters other than the glycol circulation rate shall be based on either the highest measured values or the annual average. For the estimated maximum potential emissions from the glycol dehydration unit(s), the glycol circulation rate used in the calculation(s) shall be the/each unit's maximum rate under its physical and operational design, consistent with the definition of potential to emit in 40 CFR 63.2.

Compliance with the operating parameter limit is achieved when the daily average of the monitoring parameter value is either equal to or greater than the minimum or equal to or less than the maximum monitoring value established under during the performance test. For inlet gas flowrate, compliance with the operating parameter limit is achieved when the value is equal to or less than the value established under 40 CFR 63.1282(g) by the manufacturer or under the performance test conducted under 40 CFR 63.1282(d)(3).

[(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(d)(1) through (5) and 40 CFR 63.1270(a)(4))

(10) The following records shall be maintained for the glycol dehydration unit(s), the control device(s), and closed-vent system(s):

a. the general recordkeeping requirements specified in 40 CFR 63.10(b)(2);

b. the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements of 40 CFR 63.1283(d);

c. continuous records of the control device operating parameters monitored to demonstrate compliance;

d. records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.1283(d);

e. for condensers installed to comply with 40 CFR 63.1275, records of the 30-day rolling average condenser efficiency determined under 40 CFR 63.1282(f);

f. for a carbon adsorption system, records identifying the schedule for carbon replacement and records of the actual carbon replacement;

g. hourly records of the flow indicator, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow monitor is not operating;

h. where a car-seal or lock-and-key type bypass closure mechanism is used to comply with the requirements of a closed-vent system, records from the monthly visual inspection of the seals or closure mechanism, and the duration of all periods when the car-seal or lock mechanism has been broken, the bypass line valve position has changed, or the key has been checked out for the lock;

i. records identifying all parts of the closed-vent system that are designated as unsafe or difficult to inspect in accordance with 40 CFR 63.1283(c)(5) or (6), with an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment;

j. records of the initial and annual leak detection inspection of the closed vent system, from the glycol dehydration unit's process and reboiler vents to the control device; and for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, a record of the following information:

i. the instrument identification numbers, operator name or initials, and identification of the equipment;

ii. the date the leak or defect was detected and the date of the first attempt to repair the leak or defect;

iii. the maximum instrument reading measured by the method specified in 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be non-repairable;

iv. identification of any "repair delayed" and the reason for the delay, if a leak or defect is not repaired within 15 calendar days after its discovery;

v. the name, initials, or other form of identification of the operator (or designee) whose decision it was that repair could not be completed without a shutdown;

vi. the expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days;

vii. the dates of shutdowns that occur while the equipment is unrepaired; and

viii. the date of successful repair of each leak or defect;

k. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected;

l. records of glycol dehydration unit baseline operations calculated as required under 40 CFR 63.1281(e)(1);

m. where demonstrating compliance with the BTEX limit through process modification, the records documenting that the facility continues to operate under the conditions specified in 40 CFR 63.1281(e)(2);

n. the testing method used for demonstrating compliance with BTEX limit;

o. the following records when using a flare to comply with 40 CFR 63.1281(d):

i. the flare design (i.e., steam-assisted, air-assisted, or non-assisted);

ii. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.1282(d)(2); and

iii. all hourly records and other recorded periods when the pilot flame is absent.

The permittee shall maintain files of all the required information identified in 40 CFR 63.1284 (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, and report. The most recent 12 months of all applicable records shall be accessible from a central location by computer or other means that provides access within 2 hours following any request for them.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284)

(11) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and

span adjustments), the continuous monitoring system(s) required in 40 CFR 63.1283(d) must be operated at all times the glycol dehydration unit is in operation. Monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under Part 63 Subpart HHH; however, records shall be kept of the times and durations of all such periods and any periods during process or control device operations when any required monitors are not operating or data were not collected:

a. monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

b. periods of non-operation resulting in cessation of the emissions; and

c. excursions due to invalid data as defined in 40 CFR 63.1283(d)(6)(iii).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284(b)(3))

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

	Applicable Rule	Requirement
a.	40 CFR 63.1285(b) and 40 CFR 63.9(b)	For each dehydration unit, an Initial Notification must be submitted to include the information required by these paragraphs. An additional copy must be sent to U.S. EPA's Office of Air Quality Planning & Standards, per 40 CFR 63.1285(b)(1).
b.	40 CFR 63.1285(b)(4) and (d); 40 CFR 63.1282(d)(3); Table 2 to Subpart HHH; and 40 CFR 63.9(h)	For each dehydration unit, a Notification of Compliance Status Report must be submitted within 180 of startup operations, to include the information identified in 40 CFR 63.1285(d).
c.	40 CFR 63.1285(e)(1) and (2); and 40 CFR 63.10(e)(3)	A major source of HAP must submit semiannual reports to include the information identified in 40 CFR 63.1285(e)(2).
d.	OAC 3745-21-10(A)(3) and (4) and 40 CFR 63.9(e), per Table 2 of	Must submit a Notice of Intent to Test to the district office or local air agency at least 60 calendar days before the performance test is scheduled. Test results must be submitted

	Applicable Rule	Requirement
	Subpart HHH	within 30 days after the performance test is completed.
e.	40 CFR 63.1285(f)	Notification of a process change, from information submitted in the Notification of Compliance Status Report, must be submitted within 180 days following the change.
f.	Table 2 to Part 63, Subpart HHH	Table 2 identifies the applicable reporting requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.9 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(3) The permittee of the existing small glycol dehydration unit, located at the natural gas transmission and/or storage facility, shall submit an initial notification by 10/15/13 (1 year after becoming subject to the provisions of Part 63 Subpart HHH) that the facility is subject to the provisions of the NESHAP. The initial notification shall contain the following information:

a. the name and address of the affected source;

b. a statement that the facility is subject to the requirements of Part 63, Subpart HHH;

c. identification of the subject source as each existing small glycol dehydration unit;

d. the type of liquid glycol that will be used in each unit and its maximum design circulation rate;

e. identification of the emission points from the glycol dehydration unit(s) and the possible hazardous air pollutants, i.e., benzene, toluene, ethyl benzene, xylene; and

f. a statement that the unit is an existing small glycol dehydration unit located at a major source of HAP.

In addition to submitting an initial notification to Ohio EPA, Central District Office, Division of Air Pollution Control, a copy of the initial notification must be submitted to U.S. EPA Region 5 at the following address: U.S. EPA Region 5, Ralph Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, IL 60604.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1285(b)(1), 40 CFR 63.9(a) and (b))

(4) Personnel from Ohio EPA, Central District Office shall be notified 60 days prior to initiation of the applicable performance tests or a performance evaluation of a CMS required to demonstrate compliance. Ohio EPA staff shall be permitted to examine equipment and witness the certification tests. The test results shall be submitted to Ohio EPA, Central District Office within 30 days after the test is completed. If conducting a performance evaluation of a continuous emissions monitoring system used to

demonstrate compliance, two copies of the notification of the performance evaluation and the test results shall be submitted to Ohio EPA, one copy to Ohio EPA, Central District Office and one copy to Ohio EPA, Central Office, Division of Air Pollution Control.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), 40 CFR 63.1285(b)(2) and (3), 40 CFR 63.8(e)(2), and 40 CFR 63.7(b))

(5) Following the initial performance test and each required sequential determination and/or demonstration of compliance, the permittee shall submit to the Director (Ohio EPA, Central District Office) the Notification of Compliance Status Report, signed by the owner or operator or other responsible official who is certifying the accuracy and completeness of the report. The compliance notification shall be postmarked no later than 30 days following the completion of the compliance demonstration. The first Notification of Compliance Status Report must be submitted within 180 days after the compliance date identified in 40 CFR 63.1270. The compliance report shall include the following information:

a. the NESHAP (applicable subpart) and emissions and/or other limitation(s) applicable to the glycol dehydration unit(s);

b. the method that was used to determine compliance with the applicable limitation and/or requirement and the date each compliance demonstration was conducted;

c. the results of any required performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted to demonstrate compliance;

d. the methods that will be used for determining continuing compliance, including a description of the monitoring, the records maintained of the process and/or equipment parameters, and test methods;

e. the mass emission rate of TOC (minus methane and ethane) or total HAP emitted by the glycol dehydration unit(s), as measured in accordance with the test methods specified in 40 CFR 63.1282;

f. the analysis demonstrating whether the glycol dehydration unit(s) is/are a major source for HAP and the supporting potential and controlled emissions data to document the determination;

g. a description of the air pollution control equipment (or control method) for each emission point and the control efficiency (%) for each control device/method;

h. a statement, signed by a responsible official, as to whether the glycol dehydration unit(s) has/have met the relevant standards, limitations, and/or other requirements of the NESHAP; and if not, the proposed method and time-line for achieving compliance.

i. if a closed-vent system and a control device other than a flare are used to demonstrate compliance, the permittee shall submit the following information:

i. the results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii); and

ii. if using a condenser, documentation of the condenser design analysis as specified in 40 CFR 63.1282(d)(4), if electing to demonstrate compliance, as permitted, using the design analysis and gas analyses; or

iii. the performance test results, including the percent reduction of total HAP or TOC (minus methane and ethane) or the outlet concentration of HAP or TOC; and the value of the monitored parameters, averaged over the full period of the performance test;

j. if a closed-vent system and a flare are used to demonstrate compliance, the permittee shall submit performance test results to include the following information:

i. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations; and

ii. a statement of whether a flame was present at the pilot light over the full period of the compliance determination;

k. the results of the initial inspection of the closed-vent system, performed in accordance with 40 CFR 63.1283(c)(2)(i) and (ii);

l. one complete test report for each test method used to document compliance, to include: a description of the sampling site, the sampling and analysis procedures, any modifications to standard procedures, the quality assurance procedures, the record of operating conditions during the test, any record of preparation of standards, record of calibrations, the raw data sheets for field sampling and laboratory analyses, documentation of calculations, and any other information required by the test method;

m. for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d):

i. the minimum or maximum operating parameter value for the control device, established to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of §63.1281(d)(1) or (e)(3)(ii);

ii. an explanation of the rationale for why the operating parameter values were selected and any data and calculations used to develop the minimum or maximum value; and

iii. a definition of the source's operating day for purposes of determining daily average values of monitored parameters (hours of operation per day);

n. the results of any continuous monitoring system performance evaluations;

o. the method used to determine the maximum natural gas or hydrocarbon liquid throughput;

p. the predetermined carbon replacement schedule if demonstrating compliance using a carbon adsorption system;

q. the method(s) used to demonstrate compliance with the chosen compliance option, i.e., for 0.90 MG/year benzene, 95% control of TOC or total HAP, 20 ppmv TOC or total HAP, or meeting the requirements of 40 CFR 63.11(b) for a flare; and

r. a statement as to whether the source has complied with the requirements of 40 CFR Part 63, Subpart HHH.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04 [30-day submission], 40 CFR 63.1285(d), and 40 CFR 63.9(h))

(6) Semiannual Reports shall be submitted for a major source, beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due. The following information shall be included in the semiannual report:

a. the information required under 40 CFR 63.10(e)(3) for continuous monitoring systems;

b. a description of all excursions that occurred during the 6-month reporting period, as identified 40 CFR 63.1283(d)(6);

c. for each excursion from the established daily average value of the operating parameter used to demonstrate continuous compliance, the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the excursion;

d. for each excursion caused when the 30-day average condenser control efficiency is less than 95%, as specified in 40 CFR 63.1283(d)(6)(ii), the report must include the 30-day average values of the condenser control efficiency, determined in accordance with 40 CFR 63.1282(f), and the date and duration of the excursion;

e. for each excursion caused by the lack of monitoring data, i.e., less than 75% of the operating hours in any day (per 40 CFR 63.1283(d)(6)(iii)), the report must include the date and duration of time when the monitoring data were not collected and the reason;

f. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, the records specified in 40 CFR 63.1284(b)(7) identifying each leak and information related to the date of its detection and repair;

g. for each closed-vent system with a bypass line, records of all periods when the vent stream is diverted from the control device through a bypass line and/or all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out;

h. the information necessary to document the glycol dehydration unit was in compliance during the reporting period;

i. identification of any changes made to the glycol dehydration unit(s), the closed-vent system, or control device that would alter the method of compliance;

j. if there were no excursions during the reporting period, a statement to that effect;

k. if applicable, a statement that there no continuous monitoring system, used to demonstrate compliance, was inoperative, out of control, repaired, or adjusted during the reporting period;

l. if the compliance demonstration was approved to include a process modification to attain the 95% reduction of emissions, the information supporting compliance; and

m. for flares, any periods of time when the pilot flame was absent and any record of visible emissions.

n. for a combustion control device performance tested in accordance with 40 CFR 63.1282(g) by the manufacturer:

i. each excursion from the maximum inlet gas flowrate, the flowrate measured, and the date and duration of the exceedance;

ii. each excursion from the visible emissions standard identified in 40 CFR 63.1282(h)(3), the total time visible emissions exceeded 2 minutes in any hour of observation, the date and duration of the period of the exceedance, the repairs made to the unit, and the date the unit was returned to service and visible emissions were eliminated; and

iii. any period of time when the pilot flame was absent; and

iv. the date of the semi-annual maintenance inspection required to be conducted for the combustion control device under 40 CFR 63.1283(b) and the modifications, maintenance (e.g. cleaning of the fuel nozzles), or repairs made;

o. the results of any periodic test conducted during the reporting period; and

p. certification by a responsible official of the truth, accuracy, and completeness of the report.

((Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(e))

(7) Where a combustion control device model is tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall submit the following information in the Notification of Compliance Status Report for the test report required under 40 CFR 63.1285(d)(1)(iii):

a. a full schematic of the control device and dimensions of the device components;

b. the design net heating value (minimum and maximum) of the device;

c. the test fuel gas flow range (in both mass and volume), including the minimum and maximum allowable inlet gas flowrate;

d. the air/stream injection/assist ranges, if used;

e. the test parameter ranges applicable for the tested model, i.e.:

i. the fuel gas delivery pressure and temperature;

ii. the fuel gas moisture range;

iii. the purge gas usage range;

iv. the condensate (liquid fuel) separation range;

v. the combustion zone temperature range. This is required for all devices that measure this parameter;

vi. the excess combustion air range;

vii. the flame arrestor(s);

viii. the burner manifold pressure;

ix. the pilot flame sensor;

x. the pilot flame design fuel and fuel usage;

xi. the tip velocity range;

xii. the Momentum flux ratio;

xiii. the exit temperature range;

xiv. the exit flowrate; and

xv. the wind velocity and direction.

The test report shall include all calibration quality assurance/quality control data, calibration gas values, gas cylinder certification, strip charts, the test times, and calibration values.

(Authority for term: OAC rule 3745-77-07(C)(1)) and 40 CFR 63.1282(g)(8))

(8) If the permittee is using a combustion control device model tested under 40 CFR 63.1282(g) by the manufacturer, and the test results for that model have not been posted by the manufacturer at the website identified at: epa.gov/airquality/oilandgas/, then an electronic copy of the performance test results shall be submitted by the permittee via e-mail to Oil_and_Gas_PT@EPA.GOV.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(d)(1)(ii))

(9) Within 60 days following the date of completing each performance test (required to demonstrate compliance with Part 63 Subpart HHH), the permittee must submit the test results to U.S. EPA's WebFIRE database using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), www.epa.gov/cdx . Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT), found at http://www.epa.gov/ttn/chief/ert/index.html. Only data collected using test methods identified on the ERT Website are subject to this requirement

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(g))

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:

0.0862 lb/hr and 0.005 TPY of SO_2.

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.057 lb SO_2/mmBtu (20 gr S/100scf) multiplied the 1.15 mmBtu/hr NAO flare plus the product of an emission factor of 0.057 lb/mmBtu (20 g S/100 scf) multiplied by 0.35 mmBtu/hr NATCO reboiler burner.

The annual limitation was established based on an average annual sulfur concentration of 0.25 grains S per 100 cubic feet of natural gas. Therefore, compliance with the annual emission limitation shall be determined based on the emission factor of 0.000714 lb SO_2/mmBtu for the flare and reboiler. The annual limitation was established by multiplying this annual average hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6C.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

0.86 lb/hr and 3.78 TPY of VOC.

Applicable Compliance Method:

The hourly emission rate is derived using the Gas Research Institute simulation program, GLYCalc version 3, based on wet gas analyses of the gases assuming a dehydrator gas feed rate of 250 mmscf/day multiplied by 0.02 representing 98% flare destruction efficiency (0.84 lb VOC/hr controlled emissions) plus the product of an emission factor of 0.014 lb VOC/mmBtu (AP-42 Tbl 13.5-1, 1/95; 10% of THC assumed to be VOC) multiplied by 1.15 mmBtu/hr NAO flare burner rate plus the product of an emission factor of 0.005 lb VOC/mmBtu (AP-42 Tbl 1.4-2, 7-98) multiplied by 0.35 mmBtu/hr NATCO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with the emission limitation for the 0.35 mmBtu/hr NATCO reboiler through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

0.11 lb/hr and 0.48 TPY of NOx.

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.068 lb NOx/mmBtu (AP-42, Tbl 13.5-1, 1/95) multiplied by the 1.15 mmBtu/hr NAO flare plus the product of an emission factor of 0.098 lb NOx/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 0.35 mmBtu/hr NATCO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

0.45 lb/hr and 1.97 TPY of CO.

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.37 lb CO/MMBtu (AP-42, Tbl 13.5-1, 1/95) multiplied by 1.15 mmBtu/hr NAO flare plus the product of an emission factor of 0.0824 lb CO/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 0.35 mmBtu/hr NATCO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

0.003 lb/hr and 0.013 TPY of PM.

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by the 1.15 mmBtu/hr NAO flare plus the product of an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by 0.35 mmBtu/hr NATCO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f. Emission Limitation:

Visible particulate emissions from the boiler stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

g. Emission Limitation:

Particulate emissions (PE) from the boiler stack shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.0019 lb PM10/mmBtu multiplied by 0.35 mmBtu/hr NATCO reboiler burner. The emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 1: External Combustion Sources, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-10(B)(1), OAC rule 3745-17-03(B)(9), and OAC rule 3745-77-07(C)(1))

h. Emissions Limitations:

BTEX emissions from the existing small glycol dehydration unit(s) shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii); or, if it can be demonstrated, may meet this limit without controls:

For new units:

$EL_{BTEX} = 3.10 \times 10^{-4} \times \text{throughput} \times C_{i,BTEX} \times 365 \text{ days/yr} \times 1\text{Mg}/1{,}000{,}000 \text{ g}$

Where:

EL_{BTEX} = unit-specific BTEX emission limit, Mg/yr

3.10×10^{-4} = BTEX emission limit for new units, g BTEX/scm – ppmv

Throughput = annual average daily natural gas throughput, scm/day

$C_{i,BTEX}$ = average annual BTEX concentration of natural gas at the inlet to the glycol dehydration unit, ppmv.

Applicable Compliance Method:

The permittee, demonstrating compliance through performance testing to meet the applicable emission standard, shall do so using the following methods and procedures in accordance with 40 CFR 63.1282(c)(2) if uncontrolled or 40 CFR 63.1282(d) if controlled:

i. Method 1 or 1A, as appropriate, at 40 CFR Part 60, Appendix A shall be used for selection of the sampling sites. Any references to particulate mentioned in Methods 1 and 1A do not apply. To determine compliance with the BTEX limitation, sampling sites shall be located at the outlet of the final control device or, if compliance can be demonstrated with no controls, at the process vent of the glycol dehydration dehydrator.

ii. Method 2, 2A, 2C, or 2D, as appropriate, at 40 CFR Part 60, Appendix A shall be used to determine the gas volumetric flowrate.

iii. The integrated sampling and analysis procedures of Method 3A or 3B at 40 CFR Part 60, Appendix A, or other method otherwise approved by the Administrator, shall be used to determine the oxygen concentration, where a correction factor is required for excess air.

iv. Method 18 at 40 CFR Part 60, Appendix A, ASTM D6420–99 (2004) (Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry), or other method otherwise approved by the Administrator, shall be used to determine BTEX emissions, in kilograms/hour, as determined in 40 CFR 63.1282(d)(3)(v) using the following procedures and calculated as follows:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of 4 grab samples shall be taken. If grab sampling is used, the samples shall be taken at approximately equal intervals in time, i.e., every 15-minute intervals during the run.

(b) The mass rate of BTEX (Eo) shall be computed using the following equation:

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj}\right) Q_o$$

Where:

Eo= Mass rate of BTEX at the outlet of the control device, dry basis, kilogram per hour.

Coj= Concentration of sample component j of the gas stream at the outlet of the control device, on a dry basis, parts per million by volume.

Moj= Molecular weight of sample component j of the gas stream at the outlet of the control device, gram/gram-mole.

Qo= Flowrate of gas stream at the outlet of the control device, dry standard cubic meter per minute.

K_2= Constant, 2.494×10^{-6} (parts per million) (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in sample.

v. Only BTEX compounds measured by Method 18 from 40 CFR Part 60, Appendix A, or ASTM D6420–99 (2004) shall be summed using the equation above, as specified in 40 CFR 63.1282(c)(2)(iii) for uncontrolled units or in 40 CFR 63.1282(d)(3)(v) for controlled units;

vi. The mass rate of BTEX at the outlet of the glycol dehydration unit process vent may be calculated using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and shall be determined using the procedures documented in the Gas Research Institute (GRI) report entitled ‘‘Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions’’ (GRI–95/0368.1), and all BTEX measured by Method 18 or ASTM D6420–99 shall be summed;

vii. Method 25A, 40 CFR Part 60, Appendix A shall be used for estimated VOC emissions.

viii. Operating parameters shall be established in accordance with 40 CFR 63.1283(d), as applicable to the chosen control device, during the performance test to demonstrate continuous compliance.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1281(f)(1), 40 CFR 63.1282(a), (c), through (d)(3)(v), and 40 CFR 63.1283(d))

i. An initial performance test shall be conducted within 180 days after the compliance date, or by 4/13/15 for existing small glycol dehydration units, except that the initial performance test for existing units demonstrating compliance using a combustion control device (i.e., a combustion control device installed on or before August 23, 2011) at major sources shall be conducted no later than 10/15/15.

The first periodic performance test shall be conducted no later than 60 months after the initial performance test is required to be conducted. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. The periodic performance test results must be submitted in the next Semiannual Report as specified in 40 CFR 63.1285(e)(2)(x). Combustion control devices meeting the following criteria are not required to conduct periodic performance tests:

i. a combustion control device whose model is tested by the manufacturer and is meeting the criteria of 40 CFR 63.1282(g), or

ii. a combustion control device demonstrating, during the initial performance test conducted under 40 CFR 63.1282(d), the combustion zone temperature is an indicator of the destruction efficiency and is operated at a minimum temperature of 760 degrees C.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1282(d)(3)(vi))

j. Emissions Limitation:

Closed Vent Systems.

Where meeting the emissions standard using a control device, the gas stream from the glycol dehydration unit(s) process vents shall be routed through a closed-vent system to a control device meeting the requirements of 40 CFR 63.1281(c) and (d). The closed-vent system shall be designed and operated with no detectable emissions. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background.

Applicable Compliance Method:

Initial and annual visual inspections of the closed vent system shall meet the requirements of 40 CFR 63.1283(c) and shall be conducted in accordance with the test procedure set forth in Method 21 of 40 CFR Part 60, Appendix A and as identified in 40 CFR 63.1282(b). The detection of leaks of VOC into the ambient air from equipment and background level shall be determined as follows:

i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21 and the instrument shall be calibrated each day before use.

ii. The following calibration gases shall be used:

(a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and

(b) a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.

All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background (per 40 CFR 63.1282(b)(8)).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1281(c), 40 CFR 63.1282(b), and 40 CFR 63.1283(c))

k. Emissions Limitation:

Control Device Requirements.

Unless it can be demonstrated that the uncontrolled BTEX emissions from the process vents of the glycol dehydration unit(s) can met the appropriate standard calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the requirements of 40 CFR 63.1282(c)(2), the mass content of BTEX from the glycol dehydration unit, in the gases vented to the control device, shall be reduced to meet the limit calculated in 40 CFR 63.1275(b)(1)(iii),as determined in accordance with the requirements of 40 CFR 63.1282(d)(3)(v).

Applicable Compliance Method:

Emissions from the glycol dehydration unit shall be vented through a closed vent system meeting the requirements of 40 CFR 63.1281(c) and to a control device meeting the requirements of 40 CFR 63.1275 and 40 CFR 63.1281(f); and the control device shall meet the following requirements:

i. An open flare used to demonstrate compliance shall be designed and operated in accordance with 40 CFR 63.1282(d)(2) and 40 CFR 63.11(b); and it must be equipped with a heat sensing monitoring device and recorder that indicates the continuous ignition of the pilot flame per 40 CFR 63.1283(d)(3)(i)(C);

ii. A demonstration of compliance using a combustion device or enclosed flare shall be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3), and it must be equipped with a continuous temperature monitoring device which shall be used to establish a minimum operating temperature in accordance with 40 CFR 63.1282(e) and 40 CFR 63.1283(d);

iii. A demonstration of compliance using a condenser may be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3); or a design analysis may be used in accordance with 40 CFR 63.1282(d)(4); or a condenser performance curve may be generated using the GRI-GLYCalc™ model in accordance with 40 CFR 63.1282(d)(5) and (f). The condenser must be equipped with a continuous parameter monitoring device and must establish a minimum or maximum operating parameter in accordance with 40 CFR 63.1283(d); and

iv. A demonstration of compliance using a carbon adsorption system shall be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3), and it must be equipped with a continuous parameter monitoring device which shall be used to establish minimum or maximum operating parameters in accordance with 40 CFR 63.1283(d)(3)(i)(F) for the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle, the average carbon bed temperature for the duration of the carbon bed steaming cycle, and the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle; or alternatively the carbon replacement for non-regenerative carbon may be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(G).

v. Potential BTEX emissions estimates shall be based on the maximum glycol circulation rate(s), in gallons per minute (gpm); the worst case pollutant concentrations from representative extended gas analyses of the inlet wet gas; and the maximum natural gas flow rate, as determined by 40 CFR 63.1282(a)(1)(i); or for a new unit, potential emissions shall be estimated in accordance with 40 CFR 63.1270(a) and increased by a factor of 1.2.

vi. Where a control device is required to meet the BTEX limit, the gas stream from the glycol dehydration unit process vent shall be routed through a closed-vent system to control device that meets the requirements of 40 CFR 63.1281(f).

vii. The actual flowrate of natural gas to the glycol dehydration unit(s) shall be made by installing a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2% or better. The annual natural gas flowrate shall be converted to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processes natural gas.

viii. A performance test conducted by the manufacturer of a combustion control device may be used to demonstrate compliance if:

(a) the manufacturer has demonstrated compliance for the specific model in accordance with all of the requirements contained in 40 CFR 63.1282(g);

(b) the actual average inlet waste gas flowrate does not exceed the maximum established by the manufacturer and is determined using the model GRI-GLYCalc version 3.0 or higher, ProMax, or AspenTech HYSYS, where inputs to the models are representative of actual operating conditions of the controlled unit(s);

(c) a heat sensing device, equipped with a continuous recorder, is installed that indicates continuous ignition of the pilot flame;

(d) the combustion control device is operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour of operation; and 1-hour visible emissions readings, using Method 22 at 40 CFR Part 60, Appendix A-7, are conducted quarterly; and

(e) the permittee develops an inspection and maintenance plan for the combustor which shall include the manufacturer's recommendations for ensuring proper operations; and semiannual inspections are conducted with maintenance and replacement of components in accordance with the plan.

In accordance with 40 CFR 63.1282(d)(3)(iii)(B)*(4)* for controlled and 63.1282(c)(2)(iii) for uncontrolled small glycol dehydration units, the GRI-GLYCalc™ model, Version 3.0 or higher, can be used to calculating the mass rate of BTEX.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1275(c)(3)(iii), 40 CFR 63.1281(f), 40 CFR 63.1282, and 40 CFR 63.1283(b) through (d))

l. Where using a condenser as a control device the permittee shall establish a condenser performance curve using one of the following methods and in accordance with 40 CFR 1283(d)(5)(ii):

i. If using a condenser design analysis, in accordance with the requirements of 40 CFR 63.1282(d)(4), a condenser performance curve and the minimum or maximum operating parameter value(s) shall be established based on the design analysis which may be supplemented by the manufacturer's recommendations.

ii. If conducting a performance test, in accordance with the requirements of 40 CFR 63.1282(d)(3), the condenser performance curve shall be based

on values measured during the performance test and supplemented as necessary by the condenser design analysis or the manufacturer's recommendations or both.

iii. As an alternative to using the condenser design analysis, the permittee may use the procedures documented in the GRI report entitled ''Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions'' (GRI–95/0368.1) as inputs for the model GRI-GLYCalc™, Version 3 or higher, to generate a condenser performance curve.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

m. Where demonstrating compliance using a condenser's design analysis, the permittee shall establish the relationship between the condenser performance curve and the condenser outlet temperature; and the control efficiency shall be determined as follows:

i. The design analysis shall include the vent stream composition, constituent concentrations, flowrate, relative humidity, and temperature, and shall establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

ii. Following 30 days of operations, the permittee shall calculate the 30-day average BTEX emission reduction necessary to meet the BTEX limit using the following procedures:

(a) monitor and calculate the daily average condenser outlet temperature in accordance with 40 CFR 63.1283(d)(4);

(b) determine the condenser efficiency for each operating day using the daily average condenser outlet temperature and the condenser performance curve; and

(c) at the end of each operating day, calculate the 30-day BTEX emission reduction from the condenser efficiencies for the preceding 30 operating days.

iii. Compliance is achieved if the average BTEX emission reduction calculated for each 30-day average is equal to or greater than the minimum percent reduction necessary to meet the BTEX limit.

If the permittee uses a combination of process modification(s) and a condenser in accordance with the requirements of 40 CFR 63.1281(e), the 30-day BTEX emission reduction shall be calculated using the emission reduction achieved through process modifications and the condenser efficiency as determined above, both for the previous 30 operating days. Or if it is determined that the design analysis is not sufficient to demonstrate compliance, the permittee shall

be required to conduce a performance test to demonstrate compliance with the BTEX limit and to identify the minimum percent reduction necessary to meet the BTEX limit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1282(f), 40 CFR 63.1281(f)(1)(ii), 40 CFR 63.1282(d)(4) though (5), and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

n. The maximum annual facility natural gas throughput shall be calculated as follows:

Throughput = 8760 / ($1/IR_{max}$ + $1/WR_{max}$)

Where:

Throughput = the maximum annual facility wide natural gas throughput in cubic meters per year

IR_{max} = maximum facility injection rate in cubic meters per hour

WR_{max} = maximum facility withdrawal rate in cubic meters per hour

8760 = maximum hours of operation per year.

A facility that only transports natural gas, a facility that increases its throughput above the throughput calculated above, and/or a new facility estimating the operational natural gas throughput before startup shall calculate the maximum natural gas throughput as the highest annual natural gas throughput times a factor of 1.2.

(Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR 63.1270(a)(1), (2), through (3))

o. Emissions Limitation:

Compliance using an open flare.

There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation and the flare shall be designed and operated in accordance with 40 CFR 63.11(b).

Applicable Compliance Method:

Compliance with the visible emissions limitation shall be determined in accordance with U.S. EPA Method 22 in Appendix A of 40 CFR Part 60. The heat content, flowrate, and exit velocity shall be determined in accordance with 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1281(d)(1)(iii), and 40 CFR 63.1282(d)(2))

g) Miscellaneous Requirements

(1) The permittee shall meet the applicable requirements of the most current version of 40 CFR Part 63 Subpart HHH following any amendments to these rules, which may supersede any requirements identified in this permit.

5. B024, Recip Engine GEN #099G1

Operations, Property and/or Equipment Description:

4SLB Waukesha F2895GL Recip Engine (Emergency Generator) GEN #099G1, 668 Brake HP, Product Rating 607 HP.

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 No. 01-4643, as issued 12/29/1993)	Emissions shall not exceed: 1.5 lbs/hr and 0.04 TPY of VOC 2.2 lbs/hr and 0.6 TPY of NOx, and 3.93 lbs/hr and 1.0 TPY of CO. Compliance with this rule also includes compliance with OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(5)(b). See c)(1) below.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)a. below.
e.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. 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. Therefore, the unit do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 63, Subpart A, including the initial notification requirements specified in 40 CFR 63.6645(d). The facility is identified as a major source for HAPs.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

c) Operational Restrictions

(1) The maximum annual operating hours for this emissions unit shall not exceed 500 hours based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1))

(2) 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) The permittee shall maintain monthly records of the following information:

a. the operating hours for each month, and

b. the rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1))

(2) 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))

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit semi-annual deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month restriction on the hours of operation for this emissions unit.

The semi-annual deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

(3) 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))

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:

1.5 lbs/hr and 0.04 TPY of VOC.

Applicable Compliance Method:

Compliance shall be based upon emissions factor 1.0 gram non-methane hydrocarbon (NMHC)/hp-hr, as provided by the manufacturer (Waukesha, PB No. 318, dated 10/1/1991), multiplied by product rating of 674 hp, and multiplied by the conversation factor 1lb/454 grams.

The annual emission limitations were determined by multiplying the pound pollutant per hour emissions limitation by the emission unit's maximum annual operating schedule of 500 hours per year, then dividing by 2000 pound per ton. Therefore, provided compliance is shown with the maximum annual operating schedule restriction, compliance with the annual emission limitations shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

2.2 lbs/hr and 0.6 TPY of NOx,

Applicable Compliance Method:

Compliance shall be based upon emissions factor 1.5 grams NOx/hp-hr, as provided by the manufacturer (Waukesha, PB No. 318, dated 10/1/1991), multiplied by product rating of 674 hp, and multiplied by the conversation factor 1lb/454 grams.

The annual emission limitations were determined by multiplying the pound pollutant per hour emissions limitation by the emission unit's maximum annual operating schedule of 500 hours per year, then dividing by 2000 pound per ton. Therefore, provided compliance is shown with the maximum annual operating schedule restriction, compliance with the annual emission limitations shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

3.93 lbs/hr and 1.0 TPY of CO.

Applicable Compliance Method:

Compliance shall be based upon emissions factor 2.65 grams CO/hp-hr, as provided by the manufacturer (Waukesha, PB No. 318, dated 10/1/1991), multiplied by product rating of 674 hp, and multiplied by the conversation factor 1lb/454 grams.

The annual emission limitations were determined by multiplying the pound pollutant per hour emissions limitation by the emission unit's maximum annual operating schedule of 500 hours per year, then dividing by 2000 pound per ton. Therefore, provided compliance is shown with the maximum annual operating schedule restriction, compliance with the annual emission limitations shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

Emission Limitation:

Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-2 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

6. B025, Recip Engine GEN #099G3

Operations, Property and/or Equipment Description:

4SRB Waukesha F817G Recip Engine (Emergency Generator, No. 0099G3), 213 Brake HP, Product Rating 194 HP.

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) (P0116355, as issued 4/14/2014)	Emissions shall not exceed: 0.67 lb/hr and 0.03 TPY of VOC 5.0 lbs/hr and 2.27 TPY of NOx, 8.41 lbs/hr and 3.82 TPY of CO, and 0.044 lb/hr and 0.02 TPY of PM. See c)(1) below.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE), from the emissions unit, shall not exceed 0.310 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)a. below.
e.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)b. below.
f.	40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)c., c)(3) though c)(6), d)(3), d)(4), e)(4), and e)(5) below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. Table 8 to Subpart ZZZZ of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart ZZZZ of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

c. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6595(a)(1)	The compliance date for Part 63 Subpart ZZZZ for existing SI RICE is 10/19/13.
Applicable Tables from Part 63, Subpart ZZZZ	Compliance requirements in Table 2c #6; continuous compliance in Table 6 #9; general provision from Subpart A in Table 8.
40 CFR 63.6602	Maintain compliance with operational limitations in Table 2c #6 (inspection and maintenance requirements) to Part 63 Subpart ZZZZ.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the SI RICE, as identified in Table 8 to Subpart ZZZZ.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

c) Operational Restrictions

(1) The maximum annual operating hours for this emissions unit shall not exceed 1000 hours per rolling, 12-month period.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1))

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

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

(3) There is no time limit on the use of the emergency stationary RICE during emergency situations; however, the emergency engine shall not be used in any operations other than an emergency with the following exceptions:

a. The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the facility's insurance company. Maintenance checks and readiness testing is limited to 100

hours per year, unless additional time is approved by Ohio EPA or additional hours are required by Federal, State, or local standards.

b. The emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot include peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except

c. The emergency engine may be operated for a maximum of 15 hours per year as part of a demand-response program if the regional transmission organization, or equivalent balancing authority, and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or an unacceptable voltage level.

d. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur; and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand-response operation shall be counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is limited to emergency power.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ - Section 63.6640(f)(1))

(4) Unless meeting the requirements of 40 CFR 63.6625(j), the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first; shall inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first; and shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace them as necessary. A log shall be maintained for the hours of operation between each oil, filter, and spark plug change and the date of each required inspection.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6602, 63.6625(j), Table 2c (No. 6), and Table 6 (No.9))

(5) The permittee shall install a non-resettable hour meter in order to record the hours of operation during emergency and non-emergency conditions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6625(f) and 63.6655(f))

(6) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(e)	Operate & maintain RICE according to mfg. instructions and develop a facility maintenance plan for the RICE that meets the requirements of Subpart ZZZZ Table 2c #6.
40 CFR 63.6625(f)	Install a non-resettable hour meter by compliance date.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.
40 CFR 63.6625(j)	Oil analysis program, option to extend the oil change frequency.
40 CFR 63.6640(f)	The emergency RICE is limited to 100 hours/year for maintenance checks and readiness testing and may be operated up to 50 hours/year in non-emergency situations which are counted towards the 100 hours provided for maintenance and testing. The 50 hours per year cannot be used for peak shaving or to generate income to supply power to an electric grid, but can include a maximum of 15 hours/year as part of a demand response program if the regional transmission organization determines there are emergency conditions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the operating hours for each month, and

b. the rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

(2) 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))

(3) The permittee shall maintain records or a log for the operation of the engine in emergency and non-emergency service, as recorded through the non-resettable hour meter. The records shall include the number or hours spent in emergency operation, including what classified the operation as an emergency; the number or hours spent in maintenance checks and readiness testing; and the number or hours spent in non-emergency operations. If the RICE is operated as part of a demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of the demand response.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6655(f) and 63.6640(f))

(4) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6655(f)	Maintain records of the hours of operation in emergency operations, non-emergency operations, and in maintenance checks and readiness testing, as recorded through the non-resettable hour meter. If the RICE is used for demand response, records of the notification of the emergency and the time of operation, as part of the demand response, is to be maintained.
40 CFR 63.6640(a) and 40 CFR 63.6655(d)	Keep the records required in #9 of Table 6 to Subpart ZZZZ to demonstrate continuous compliance.
40 CFR 63.6655(e)	Records of maintenance and inspections conducted in order to demonstrate compliance with Table 2c and to demonstrate that the RICE was operated and maintained according to the facility's maintenance plan.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit semi-annual deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month restriction on the hours of operation for this emissions unit.

The semi-annual deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and OAC rule 3745-77-07(C)(1))

(3) 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))

(4) The permittee shall include, in the annual compliance certification, the number of hours of operation in emergency and non-emergency service, including the time of operations for maintenance checks and readiness testing, as recorded by the non-resettable hour meter.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ - Section 63.6640(f))

(5) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6640(b); and OAC rule 3745-15-03(B)(2) and (D)	Submit, in the annual compliance certification, each instance in which the operational requirements in Table 2c of the NESHAP Subpart ZZZZ were not met.
40 CFR 63.6640(e) and OAC rule 3745-15-03(B)(2) and (D)	Submit, in the annual compliance certification, each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

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:

0.67 lb/hr and 0.03 TPY of VOC.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.000314 lb VOC/bhp-hr) multiplied by horsepower rating of engine (213 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.000314 lb VOC/ bhp-hr) multiplied by horsepower rating of engine (194 horsepower) multiplied by the annual hours of operation (1000 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.000314 lb VOC/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

(Authority for term: OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

5.0 lbs/hr and 2.27 TPY of NOx.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.0234 lb NOx/bhp-hr) multiplied by horsepower rating of engine (213 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.0234 lb NOx/bhp-hr) multiplied by horsepower rating of engine (194 horsepower) multiplied by the annual hours of operation (1000 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.0234 lb NOx/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

8.41 lbs/hr and 3.82 TPY of CO.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.0394 lb CO/bhp-hr) multiplied by horsepower rating of engine (213 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.0394 lb CO/bhp-hr) multiplied by horsepower rating of engine (194 horsepower) multiplied by the annual hours of operation (1000 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.0394 lb CO/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

0.044 lb/hr and 0.02 TPY of PM.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.000201 lb PM/bhp-hr) multiplied by horsepower rating of engine (213 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.000201 lb PM/bhp-hr) multiplied by horsepower rating of engine (194 horsepower) multiplied by the annual hours of operation (1000 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.000201 lb PM/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

f. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

7. B026, TEG Dehydration Unit No.2

Operations, Property and/or Equipment Description:

NATCO 125 mmscf/day Natural Gas Dehydrator System: Two Absorber Towers & Regenerator Still including a 1.0 mmBtu/hr NAO Reboiler (BLR4) and 1.33 mmBtu/hr flare (FLLP2). TEG Dehy No. 2.

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) (P0116355, as issued 4/14/2014)	Emissions shall not exceed: 0.13 lb/hr and 0.007 TPY of SO_2, 0.77 lb/hr and 3.37 TPY of VOC, 0.19 lb/hr and 0.83 TPY of NOx, 0.57 lb/hr and 2.50 TPY of CO, and 0.004 lb/hr and 0.018 TPY of PM.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the boiler stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
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 3745-18-06(G)	See b)(2)f. below.
e.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)g. below.
f.	40 CFR Part 63, Subpart HHH (National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage)	In accordance with 40 CFR 63.1275 and 40 CFR 63.1281, the small glycol dehydration unit at a major source of HAP shall be limited to emissions of benzene, toluene, ethyl benzene, and xylene

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(BTEX) as determined in Equation 1 for existing units in 40 CFR 63.1275(b)(1)(iii).
g.	40 CFR 63.1275(c)(1)	As an alternative, the process vent(s) from the glycol dehydration unit(s) may be connected to a process natural gas line through a closed vent system. See b)(2)h. and i.
h.	40 CFR 63.1282(d)(2) and 40 CFR 63.11(b)(4)	There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation.

(2) Additional Terms and Conditions

a. The emissions unit shall be equipped with a flare to control organic compound emissions. The flare shall be fired with natural gas.

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

b. The flare shall be designed and operated in a manner that will ensure no visible emissions, as determined by 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

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

c. The flare shall be operated at all times when emissions may be vented to it as determined by methods specified in 40 CFR 60.18(f).

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

d. The flare shall be used only when the net heating value of the gas being combusted is 200 Btu/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f).

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

e. The flare shall be designed for and operated with an exit velocity that satisfies the requirements of 40 CFR 60.18(f).

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

f. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

g. Table 2 to Subpart HHH of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart HHH of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

h. For each existing small glycol dehydration unit, installed on or before 8/23/11, BTEX emissions shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii). If no control device is needed to comply with the BTEX limit, compliance is demonstrated as specified in 40 CFR 63.1282(c)(2).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1275(b)(1)(iii), and 40 CFR 63.1275(c)(3)(iii))

i. The BTEX emission limit may be met through the use of one of the following methods:

i. connecting the process vent(s) of the glycol dehydration unit(s) through a closed vent system designed and operated in accordance with 40 CFR 63.1281(c), to a control device(s) designed and operated in accordance with 40 CFR 63.1281(f);

ii. process modifications meeting the requirements of 40 CFR 63.1281(e); or

iii. using a combination of process modifications and control device(s) meeting the requirements of 40 CFR 63. 1281(f) and closed vent system meeting the requirements of 40 CFR 63.1281(c); or

iv. demonstrate that the BTEX emissions limit is met through actual uncontrolled operation of the small glycol dehydration unit.

Operational parameters shall be documented in accordance with the requirements specified in 40 CFR 63.1283(d) and the BTEX emissions determined in accordance with the requirements specified in 40 CFR 63.1282(a)(2).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1275(b)(1)(iii)(A) through (D))

j. The control device for small glycol dehydration units used to meet BTEX the emission limit calculated in 40 CFR 63.1275(b)(1)(iii) shall be one of the following:

i. An enclosed combustion device (e.g., thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) that is designed and operated to meet the levels specified below:

(a) The mass content of BTEX in the gases vented to the device is reduced as determined in accordance with the requirements of 40 CFR 63.1282(d).

(b) The concentration of either TOC or total HAP in the exhaust gases at the outlet of the device is reduced to a level equal to or less than 20 parts per million by volume on a dry basis corrected to 3 percent oxygen as determined in accordance with the requirements of 40 CFR 63.1282(e).

If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

ii. A vapor recovery device (e.g., carbon adsorption system or condenser) or other non-destructive control device that is designed and operated to reduce the mass content of BTEX in the gases vented to the device as determined in accordance with the requirements of 40 CFR 63.1282(d).

iii. A flare, as defined in 40 CFR 63.1271, that is designed and operated in accordance with the requirements of 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(f)(1))

k. Where using a flare, as defined in 40 CFR 63.1271, for compliance, there shall be no visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours; and the compliance determination shall be conducted using Method 22 of CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(d)(2), 40 CFR 63.1281(f)(1)(iii), and 40 CFR 63.11(b)(4))

l. The permittee shall prepare a site-specific monitoring plan for each continuous parameter monitoring system (CPMS), required for compliance, that addresses the monitoring system design, data collection, quality assurance, and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d). Each CPMS shall be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan; and the permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. Performance checks, system accuracy audits, or other audits required by the plan shall be conducted at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1283(d)(1)(ii))

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))

Applicable Rule	Requirement
40 CFR 63.1275 and 40 CFR 63.1281(c) and (f)	Design and operational requirements for a closed-vent system and the control device used to comply with 40 CFR 63.1274(c)(1).
40 CFR 63.1281(c)(3); and 40 CFR 63.1283(c)(2)(iii)	Each bypass device to a closed-vent system meeting the requirements of 40 CFR 63.1281(c) must be installed with a flow indicator which takes a reading once every 15 minutes and is installed with an alarm (for any bypass); or must install a car-seal or lock-and–key mechanism on the bypass device to maintain the bypass valve in a closed position.
40 CFR 63.1281(f)(1)(iii); and 40 CFR 63.1282(d)(2).	A flare, used to demonstrate compliance with 40 CFR 63.1275(b)(1)(iii), must be designed and operated in accordance with 40 CFR 63.11(b).
40 CFR 63.1281(f)(1)(ii)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with 40 CFR 63.1282(f) and the performance test conducted in accordance with 63.1282(d).
40 CFR 63.1281(f)(1)(ii), (d)(4), and (d)(5)	A carbon adsorber used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the performance test conducted in accordance with 63.1282(d). The spent carbon must be monitored, regenerated, reactivated, or burned as required in 40 CFR 63.1281(d)(5).
40 CFR 63.1281(f)(1)(i)	A combustion device, other than a flare, used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii) or designed to reduce TOC or total HAP in the exhaust gases to a level equal to or less than 20 ppm by volume on a dry basis corrected to 3% O_2 as determined in accordance with 40 CFR 63.1282(d).
40 CFR 63.1281(f)(2)(i)	Each control device used to comply with Part 63 Subpart HHH shall be operated at all times emissions are vented from the glycol dehydration unit(s), and through a closed vent system as required by rule.
40 CFR 63.1274(h)	The glycol dehydration unit and any required control and monitoring equipment shall be operated in a

	manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart HHH)

(2) Where the demonstration of compliance for a combustion control device is tested by the manufacturer, under the provisions of 40 CFR 63.1282(g), the permittee shall demonstrate that a control device achieves the performance requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii), by installing a device tested and certified by the manufacturer and complying with the following criteria:

a. The inlet gas flowrate shall meet the range specified by the manufacturer. Flowrate shall be calculated as specified in 40 CFR 63.1283(d)(3)(i)(H)(1).

b. A pilot flame shall be present at all times of operation. The pilot flame shall be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(H)(2).

c. Devices shall be operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour. A visible emissions test using Method 22, 40 CFR Part 60, Appendix A, shall be performed each calendar quarter. The observation period shall be 1 hour and shall be conducted according to EPA Method 22, 40 CFR Part 60, Appendix A.

d. Compliance with the operating parameter limit is achieved when the following criteria are met:

i. the inlet gas flowrate is equal to or below the maximum established by the manufacturer;

ii. the pilot flame is present at all times;

iii. during the visible emissions test performed under 40 CFR 63.1282(h)(3), the duration of visible emissions does not exceed a total of 2 minutes during the observation period.

(a) Devices failing the visible emissions test shall follow manufacturers repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation.

(b) All repairs and maintenance activities for each unit shall be recorded in a maintenance and repair log and shall be available on site for inspection.

iv. Following return to operation from maintenance or repair activity, each device must pass a Method 22 visual observation as described in 40 CFR 63.1282(h)(3).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(h), 40 CFR 63.1282(d), 40 CFR 63.1283(d)(3)(i)(H), and 40 CFR 63.1283(d)(5)(i)(C))

(3) The permittee may document the conditions for which glycol dehydration unit baseline operations shall be modified to achieve the BTEX limit determined in 40 CFR 63.1275(b)(1)(iii), either through process modifications or through a combination of process modifications and one or more control devices. If a combination of process modifications and one or more control devices are used, the permittee shall also establish the emission reduction to be achieved by the control device to meet the BTEX limit for the small glycol dehydration unit process vent. Only modifications in glycol dehydration unit operations directly related to process changes, including but not limited to changes in glycol circulation rate or glycol-HAP absorbency, shall be allowed. Changes in the inlet gas characteristics or natural gas throughput rate shall not be considered in determining the overall emission reduction due to process modifications.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(2))

(4) The permittee that meets the BTEX limit using process modifications alone shall maintain records to document that the facility continues to operate in accordance with the conditions under which the glycol dehydration unit(s) was/were demonstrated to attain the limit. The permittee that meets the BTEX limit using a combination of process modifications and one or more control devices shall also meet the control device requirements for small glycol dehydration units as identified in 40 CFR 63.1281(f) and the BTEX standard must be met.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(3))

(5) Each control device used to comply with the requirements of Part 63 Subpart HHH shall be operated at all times when gases, vapors, and fumes are vented from the glycol dehydration unit, and through the closed-vent system to the control device as required under 40 CFR 63.1275. More than one unit may be vented to a control device.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(2)(i), and 40 CFR 63.1275(b)(1)(iii))

(6) For each control device monitored to demonstrate continuous compliance in accordance with the requirements of 40 CFR 63.1283(d), the permittee shall maintain the daily average of the parameter value at either equal to or greater than the minimum or equal to or less than the maximum monitoring value established during the performance test.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(e)(3), and 40 CFR 63.1283(d)(5))

(7) For each carbon adsorption system used to demonstrate compliance with the BTEX limit, the carbon shall be monitored; and it shall be replaced or regenerated, reactivated, or burned in a thermal treatment unit, incinerator, boiler, or industrial furnace that meets the applicable requirements of the unit identified in 40 CFR 63.1281(d)(5)(ii). Carbon shall be replaced with fresh carbon on a regular predetermined time interval that is no longer than the service life of the carbon adsorption system.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(3), and 40 CFR 63.1281(d)(5))

(8) The glycol dehydration unit and any required control and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1274(h))

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))

(2) The flare shall be monitored for the presence of a pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.

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

(3) The permitttee shall record the following information each month:

a. All periods during which there was no pilot flame; and

b. The operating times for the flare, monitoring equipment, and the associated emissions unit.

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

(4) The following monitoring and recordkeeping requirements are applicable to the glycol dehydration unit(s):

	Applicable Rule	Requirement
a.	40 CFR 63.1270(a)(1)	The owner or operator of the small glycol dehydration unit shall maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year.
b.	40 CFR 63.1283(c)	Inspection requirements for a closed-vent system for a dehydration unit subject to control.
c.	40 CFR 63.1284(b)(5) through (8)	Records required for each inspection of the closed-vent system for a dehydration unit subject to control.
d.	40 CFR 63.1283(d)(3)(i)(C) and 40 CFR 63.1284(e)	Where a flare is used to comply with the requirements of 40 CFR 63.1274(c), it must be equipped with a continuous recorder for the thermocouple or a heat sensing monitoring device for the pilot flame. A record must be maintained of: all periods of time when the pilot flame is out when process gas is being vented to it; all required visible emission readings; the flare design; and the heat content, flowrate, and exit velocity determinations.

	Applicable Rule	Requirement
e.	40 CFR 63.1283(c)(2)(iii); 40 CFR 63.1283(d)(6)(iv); and 40 CFR 63.1281(c)(3)(i)	A record shall be maintained for: the flow indicator readings for each bypass device to the closed-vent system and/or a record of the monthly inspection of the car-seal/lock-and–key mechanism on the bypass device, and a record of each detected bypass.
f.	40 CFR 63.1282(b),(d),(e), and (f); and 40 CFR 63.1284(a),(b), and (e) For 40 CFR 63.1274(c)	Must maintain the records required to demonstrate compliance, i.e., leak detection results demonstrating no detectable emissions from the closed-vent system and the appropriate performance test and emission test data of the control device.
g.	40 CFR 63.1282(e) and (f); 40 CFR 63.1283(d); and 40 CFR 63.1284(b)(4)	If using an enclosed combustion or vapor recovery device to demonstrate compliance with Part 63, Subpart HHH, the maximum or minimum monitoring parameter values must be recorded and maintained in accordance with these paragraphs.
h.	40 CFR 63.1283(d)(3)(i)(E)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.
i.	40 CFR 63.1283(d)(3)(i)(F) or (G)	A carbon adsorption system used to demonstrate compliance with 40 CFR 63.1274(c)(1) must meet the monitoring and recordkeeping requirements of this paragraph.
j.	40 CFR 63.1283(d)(3)(i)(A), (B) or (D)	A combustion device used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a continuous temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.
k.	40 CFR 63.1282(d)(4) and 40 CFR 63.1282(f)	Where meeting the requirements of these paragraphs, a condenser design analysis may be used to comply with the control requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii).
l.	40 CFR 63.1283(d)(4)	Using the continuous data collected and recorded as required in the 40 CFR 63.1283(d)(3), the daily average value for each monitored operating parameter must be calculated for each operating day. Valid data points must be available for 75% of the operating hours each day.

	Applicable Rule	Requirement
m..	40 CFR 63.1283(d)(5)	For each operating parameter monitor installed in accordance w/ 40 CFR 63.1283(d), a minimum or maximum operating parameter must be established to define conditions at which the control device must be operated to continuously achieve the performance requirements of 40 CFR 63.1281(d)(1) or (e)(3). This paragraph also allows operating parameter values to be established based on a condenser's design analysis and the manufacturer's recommendations.
n.	CFR 63.1284(b)	e applicable records identified in 40 CFR 63.1284 and 40 CFR 63.10 and reports required by 40 CFR 63.1285 must be maintained for a period of 5 years following the date of record and they must be accessible upon request.
o.	ble 2 to Part 63, Subpart HHH	ble 2 identifies the applicable recordkeeping requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.8 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(5) Except for any part of the closed-vent system that is/are designated as unsafe or difficult to inspect (as identified in 40 CFR 63.1283(c)(5) or (6), the permittee shall conduct the following inspections for any closed vent system used to demonstrate compliance:

a. For joints, seams, or other connections that are not permanently or semi-permanently sealed, the permittee shall conduct an initial and annual inspections according to the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.

b. For joints, seams, or other connections that are permanently or semi-permanently sealed, the permittee shall conduct an initial inspection according to the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.

c. Following any time a component that is permanently or semi-permanently sealed (e.g., a welded joint) is repaired or replaced or such a connection is unsealed, the permittee shall monitor each such joint, seam, or other component/connection according to the test methods and procedures specified in 40 CFR 63.1282(b), to demonstrate that the sealed and/or welded joint(s) or

component(s) was/were repaired to meet the requirement for no detectable emissions.

A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(6) The flow indicator for each bypass device shall be set to take a reading at least once every 15 minutes at the inlet to the bypass device. If the bypass device valve is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, the seal or closure mechanism shall be visually inspected at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device. A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2)(iii), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(7) In the event that a leak or defect is detected, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown. A record of the date each leak is detected, the maximum instrument reading measured by Method 21, and the date each leak is successfully repaired shall be maintained as specified in 40 CFR 63.1284(b)(7) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(c)(3) and (4))

(8) The site-specific monitoring plan for the CPMS shall contain the following elements, unless alternative quality assurance and quality control procedures have been approved in accordance with 40 CFR 63.8(f)(4):

a. the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

b. sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

c. equipment performance checks, system accuracy audits, or other audit procedures;

d. ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); and

e. ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

The permittee shall conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(1)(ii))

(9) The permittee shall install and operate a continuous parameter monitoring system designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of 40 CFR 63.1281(f). The continuous parameter monitoring system shall meet the following specifications and requirements:

a. Each continuous parameter monitoring system shall measure data values at least once every hour and record either each measured data value or each block average value for each 1-hour period or shorter periods, calculated from all measured data values during the period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

b. The parameter monitoring system shall be installed, calibrated, operated, and maintained in accordance with the site-specific monitoring plan that addresses the monitoring system design, data collection, and quality assurance and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d).

c. The continuous monitoring device shall be equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device and specified as follows:

i. A thermal vapor incinerator, demonstrating that the combustion zone temperature is an accurate indicator of performance, shall be equipped with a temperature monitoring device with a continuous recorder and with a minimum accuracy of ±2% of the temperature being monitored in °C or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

ii. A catalytic vapor incinerator shall be equipped with a temperature monitoring device capable of monitoring temperature at two locations and have a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

iii. A flare shall be equipped with a heat sensing monitoring device that indicates the continuous ignition of the pilot flame.

iv. A boiler or process heater shall be equipped with a temperature monitoring device with a continuous recorded and with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

v. A condenser shall be equipped with a temperature monitoring device with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser. A condenser performance curve shall be used to establish the relationship between the condenser outlet temperature and condenser control efficiency.

vi. A regenerative-type carbon adsorption system shall be equipped with:

(a) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ±10%; and

(b) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle. The temperature monitoring device shall have a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater.

vii. For a nonregenerative-type carbon adsorption system, the design carbon replacement interval shall be monitored and established using a performance test conducted in accordance with 40 CFR 63.1282(d)(3); and the carbon replacement schedule shall be based on the total carbon working capacity of the control device and source operating schedule.

viii. Where using a continuous organic compound monitoring system to measure the concentration level of organic compounds in the exhaust vent stream from the control device, it must be installed, certified, operated, and maintained in accordance with the requirements of Performance Specification 8 or 9 of Appendix B of 40 CFR Part 60 and the manufacturer's specifications.

ix. Where demonstrating compliance using a combustion control device tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall:

(a) determine the actual average inlet waste gas flowrate using the model GRI-GLTCalc™, Version 3.0 or higher, ProMax, or AspenTech HYSYS. Inputs to the models shall be representative of actual operating conditions; and

(b) install a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

d. Except for the inlet gas flowrate, the permittee shall calculate the daily average value recorded for each monitored operating parameter for each operating day. If the glycol dehydration unit operations are continuous, the operating day is a 24-hour period. If the glycol dehydration unit operations are not continuous, the operating day is the total number of hours of operation per 24-hour period. Valid data points must be available for 75% of the operating hours in an operating day to compute the daily average.

e. The minimum operating parameter value or a maximum operating parameter value shall be established based on values measured during the performance test and supplemented, as necessary, by the control device design analysis or the manufacturer's recommendations, to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of 40 CFR 63.1281(d)(1) or 63.1281(e)(3)(ii).

f. Parameters other than the glycol circulation rate shall be based on either the highest measured values or the annual average. For the estimated maximum potential emissions from the glycol dehydration unit(s), the glycol circulation rate used in the calculation(s) shall be the/each unit's maximum rate under its physical and operational design, consistent with the definition of potential to emit in 40 CFR 63.2.

Compliance with the operating parameter limit is achieved when the daily average of the monitoring parameter value is either equal to or greater than the minimum or equal to or less than the maximum monitoring value established under during the performance test. For inlet gas flowrate, compliance with the operating parameter limit is achieved when the value is equal to or less than the value established under 40 CFR 63.1282(g) by the manufacturer or under the performance test conducted under 40 CFR 63.1282(d)(3).

[(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(d)(1) through (5) and 40 CFR 63.1270(a)(4))

(10) The following records shall be maintained for the glycol dehydration unit(s), the control device(s), and closed-vent system(s):

a. the general recordkeeping requirements specified in 40 CFR 63.10(b)(2);

b. the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements of 40 CFR 63.1283(d);

c. continuous records of the control device operating parameters monitored to demonstrate compliance;

d. records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.1283(d);

e. for condensers installed to comply with 40 CFR 63.1275, records of the 30-day rolling average condenser efficiency determined under 40 CFR 63.1282(f);

f. for a carbon adsorption system, records identifying the schedule for carbon replacement and records of the actual carbon replacement;

g. hourly records of the flow indicator, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow monitor is not operating;

h. where a car-seal or lock-and-key type bypass closure mechanism is used to comply with the requirements of a closed-vent system, records from the monthly visual inspection of the seals or closure mechanism, and the duration of all periods when the car-seal or lock mechanism has been broken, the bypass line valve position has changed, or the key has been checked out for the lock;

i. records identifying all parts of the closed-vent system that are designated as unsafe or difficult to inspect in accordance with 40 CFR 63.1283(c)(5) or (6), with an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment;

j. records of the initial and annual leak detection inspection of the closed vent system, from the glycol dehydration unit's process and reboiler vents to the control device; and for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, a record of the following information:

i. the instrument identification numbers, operator name or initials, and identification of the equipment;

ii. the date the leak or defect was detected and the date of the first attempt to repair the leak or defect;

iii. the maximum instrument reading measured by the method specified in 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be non-repairable;

iv. identification of any "repair delayed" and the reason for the delay, if a leak or defect is not repaired within 15 calendar days after its discovery;

v. the name, initials, or other form of identification of the operator (or designee) whose decision it was that repair could not be completed without a shutdown;

vi. the expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days;

vii. the dates of shutdowns that occur while the equipment is unrepaired; and

viii. the date of successful repair of each leak or defect;

k. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected;

l. records of glycol dehydration unit baseline operations calculated as required under 40 CFR 63.1281(e)(1);

m. where demonstrating compliance with the BTEX limit through process modification, the records documenting that the facility continues to operate under the conditions specified in 40 CFR 63.1281(e)(2);

n. the testing method used for demonstrating compliance with BTEX limit;

o. the following records when using a flare to comply with 40 CFR 63.1281(d):

i. the flare design (i.e., steam-assisted, air-assisted, or non-assisted);

ii. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.1282(d)(2); and

iii. all hourly records and other recorded periods when the pilot flame is absent.

The permittee shall maintain files of all the required information identified in 40 CFR 63.1284 (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, and report. The most recent 12 months of all applicable records shall be accessible from a central location by computer or other means that provides access within 2 hours following any request for them.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284)

(11) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments), the continuous monitoring system(s) required in 40 CFR 63.1283(d) must be operated at all times the glycol dehydration unit is in operation. Monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under Part 63 Subpart HHH; however, records shall be kept of the times and durations of all such periods and any periods during process or control device operations when any required monitors are not operating or data were not collected:

a. monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

b. periods of non-operation resulting in cessation of the emissions; and

c. excursions due to invalid data as defined in 40 CFR 63.1283(d)(6)(iii).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284(b)(3)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

(3) The permittee shall report the use of any material other than glycol in this emissions unit within 30 days after the occurrence.

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

Applicable Rule	Requirement
40 CFR 63.1285(b) and 40 CFR 63.9(b)	For each dehydration unit, an Initial Notification must be submitted to include the information required by these paragraphs. An additional copy must be sent to U.S. EPA's Office of Air Quality Planning & Standards, per 40 CFR 63.1285(b)(1).
40 CFR 63.1285(b)(4) and (d); 40 CFR 63.1282(d)(3); Table 2 to Subpart HHH; and 40 CFR 63.9(h)	For each dehydration unit, a Notification of Compliance Status Report must be submitted within 180 of startup operations, to include the information identified in 40 CFR 63.1285(d).
40 CFR 63.1285(e)(1) and (2); and 40 CFR 63.10(e)(3)	A major source of HAP must submit semiannual reports to include the information identified in 40 CFR 63.1285(e)(2).
OAC 3745-21-10(A)(3) and (4) and 40 CFR 63.9(e), per Table 2 of Subpart HHH	Must submit a Notice of Intent to Test to the district office or local air agency at least 60 calendar days before the performance test is scheduled. Test results must be submitted within 30 days after the performance test is completed.
40 CFR 63.1285(f)	Notification of a process change, from information submitted in the Notification of Compliance Status Report, must be submitted within 180 days following the change.

Table 2 to Part 63, Subpart HHH	Table 2 identifies the applicable reporting requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.9 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(4) The permittee of the existing small glycol dehydration unit, located at the natural gas transmission and/or storage facility, shall submit an initial notification by 10/15/13 (1 year after becoming subject to the provisions of Part 63 Subpart HHH) that the facility is subject to the provisions of the NESHAP. The initial notification shall contain the following information:

a. the name and address of the affected source;

b. a statement that the facility is subject to the requirements of Part 63, Subpart HHH;

c. identification of the subject source as each existing small glycol dehydration unit;

d. the type of liquid glycol that will be used in each unit and its maximum design circulation rate;

e. identification of the emission points from the glycol dehydration unit(s) and the possible hazardous air pollutants, i.e., benzene, toluene, ethyl benzene, xylene; and

f. a statement that the unit is an existing small glycol dehydration unit located at a major source of HAP.

In addition to submitting an initial notification to the appropriate district or local office of the Ohio EPA Division of Air Pollution Control, a copy of the initial notification must be submitted to U.S. EPA Region 5 at the following address: U.S. EPA Region 5, Ralph Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, IL 60604.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1285(b)(1), 40 CFR 63.9(a) and (b))

(5) Personnel from the Ohio EPA, Central District Office shall be notified 60 days prior to initiation of the applicable performance tests or a performance evaluation of a CMS required to demonstrate compliance. Ohio EPA staff shall be permitted to examine equipment and witness the certification tests. The test results shall be submitted to Ohio EPA, Central District Office within 30 days after the test is completed. If conducting a performance evaluation of a continuous emissions monitoring system used to demonstrate compliance, two copies of the notification of the performance evaluation and the test results shall be submitted to Ohio EPA, one copy to Ohio EPA, Central District Office and one copy to Ohio EPA, Central Office.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), 40 CFR 63.1285(b)(2) and (3), 40 CFR 63.8(e)(2), and 40 CFR 63.7(b))

(6) Following the initial performance test and each required sequential determination and/or demonstration of compliance, the permittee shall submit to the Director (Ohio EPA, Central District Office) the Notification of Compliance Status Report, signed by the owner or operator or other responsible official who is certifying the accuracy and completeness of the report. The compliance notification shall be postmarked no later than 30 days following the completion of the compliance demonstration. The first Notification of Compliance Status Report must be submitted within 180 days after the compliance date identified in 40 CFR 63.1270. The compliance report shall include the following information:

a. the NESHAP (applicable subpart) and emissions and/or other limitation(s) applicable to the glycol dehydration unit(s);

b. the method that was used to determine compliance with the applicable limitation and/or requirement and the date each compliance demonstration was conducted;

c. the results of any required performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted to demonstrate compliance;

d. the methods that will be used for determining continuing compliance, including a description of the monitoring, the records maintained of the process and/or equipment parameters, and test methods;

e. the mass emission rate of TOC (minus methane and ethane) or total HAP emitted by the glycol dehydration unit(s), as measured in accordance with the test methods specified in 40 CFR 63.1282;

f. the analysis demonstrating whether the glycol dehydration unit(s) is/are a major source for HAP and the supporting potential and controlled emissions data to document the determination;

g. a description of the air pollution control equipment (or control method) for each emission point and the control efficiency (%) for each control device/method;

h. a statement, signed by a responsible official, as to whether the glycol dehydration unit(s) has/have met the relevant standards, limitations, and/or other requirements of the NESHAP; and if not, the proposed method and time-line for achieving compliance.

i. if a closed-vent system and a control device other than a flare are used to demonstrate compliance, the permittee shall submit the following information:

i. the results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii); and

ii. if using a condenser, documentation of the condenser design analysis as specified in 40 CFR 63.1282(d)(4), if electing to demonstrate compliance, as permitted, using the design analysis and gas analyses; or

iii. the performance test results, including the percent reduction of total HAP or TOC (minus methane and ethane) or the outlet concentration of HAP or TOC; and the value of the monitored parameters, averaged over the full period of the performance test;

j. if a closed-vent system and a flare are used to demonstrate compliance, the permittee shall submit performance test results to include the following information:

i. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations; and

ii. a statement of whether a flame was present at the pilot light over the full period of the compliance determination;

k. the results of the initial inspection of the closed-vent system, performed in accordance with 40 CFR 63.1283(c)(2)(i) and (ii);

l. one complete test report for each test method used to document compliance, to include: a description of the sampling site, the sampling and analysis procedures, any modifications to standard procedures, the quality assurance procedures, the record of operating conditions during the test, any record of preparation of standards, record of calibrations, the raw data sheets for field sampling and laboratory analyses, documentation of calculations, and any other information required by the test method;

m. for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d):

i. the minimum or maximum operating parameter value for the control device, established to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of §63.1281(d)(1) or (e)(3)(ii);

ii. an explanation of the rationale for why the operating parameter values were selected and any data and calculations used to develop the minimum or maximum value; and

iii. a definition of the source's operating day for purposes of determining daily average values of monitored parameters (hours of operation per day);

n. the results of any continuous monitoring system performance evaluations;

o. the method used to determine the maximum natural gas or hydrocarbon liquid throughput;

p. the predetermined carbon replacement schedule if demonstrating compliance using a carbon adsorption system;

q. the method(s) used to demonstrate compliance with the chosen compliance option, i.e., for 0.90 MG/year benzene, 95% control of TOC or total HAP, 20

ppmv TOC or total HAP, or meeting the requirements of 40 CFR 63.11(b) for a flare; and

r. a statement as to whether the source has complied with the requirements of 40 CFR Part 63, Subpart HHH.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04 [30-day submission], 40 CFR 63.1285(d), and 40 CFR 63.9(h))

(7) Semiannual Reports shall be submitted for a major source, beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due. The following information shall be included in the semiannual report:

a. the information required under 40 CFR 63.10(e)(3) for continuous monitoring systems;

b. a description of all excursions that occurred during the 6-month reporting period, as identified 40 CFR 63.1283(d)(6);

c. for each excursion from the established daily average value of the operating parameter used to demonstrate continuous compliance, the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the excursion;

d. for each excursion caused when the 30-day average condenser control efficiency is less than 95%, as specified in 40 CFR 63.1283(d)(6)(ii), the report must include the 30-day average values of the condenser control efficiency, determined in accordance with 40 CFR 63.1282(f), and the date and duration of the excursion;

e. for each excursion caused by the lack of monitoring data, i.e., less than 75% of the operating hours in any day (per 40 CFR 63.1283(d)(6)(iii)), the report must include the date and duration of time when the monitoring data were not collected and the reason;

f. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, the records specified in 40 CFR 63.1284(b)(7) identifying each leak and information related to the date of its detection and repair;

g. for each closed-vent system with a bypass line, records of all periods when the vent stream is diverted from the control device through a bypass line and/or all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out;

h. the information necessary to document the glycol dehydration unit was in compliance during the reporting period;

i. identification of any changes made to the glycol dehydration unit(s), the closed-vent system, or control device that would alter the method of compliance;

j. if there were no excursions during the reporting period, a statement to that effect;

k. if applicable, a statement that there no continuous monitoring system, used to demonstrate compliance, was inoperative, out of control, repaired, or adjusted during the reporting period;

l. if the compliance demonstration was approved to include a process modification to attain the 95% reduction of emissions, the information supporting compliance; and

m. for flares, any periods of time when the pilot flame was absent and any record of visible emissions.

n. for a combustion control device performance tested in accordance with 40 CFR 63.1282(g) by the manufacturer:

i. each excursion from the maximum inlet gas flowrate, the flowrate measured, and the date and duration of the exceedance;

ii. each excursion from the visible emissions standard identified in 40 CFR 63.1282(h)(3), the total time visible emissions exceeded 2 minutes in any hour of observation, the date and duration of the period of the exceedance, the repairs made to the unit, and the date the unit was returned to service and visible emissions were eliminated; and

iii. any period of time when the pilot flame was absent; and

iv. the date of the semi-annual maintenance inspection required to be conducted for the combustion control device under 40 CFR 63.1283(b) and the modifications, maintenance (e.g. cleaning of the fuel nozzles), or repairs made;

o. the results of any periodic test conducted during the reporting period; and

p. certification by a responsible official of the truth, accuracy, and completeness of the report.

((Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(e))

(8) Where a combustion control device model is tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall submit the following information in the Notification of Compliance Status Report for the test report required under 40 CFR 63.1285(d)(1)(iii):

a. a full schematic of the control device and dimensions of the device components;

b. the design net heating value (minimum and maximum) of the device;

c. the test fuel gas flow range (in both mass and volume), including the minimum and maximum allowable inlet gas flowrate;

d. the air/stream injection/assist ranges, if used;

e. the test parameter ranges applicable for the tested model, i.e.:

i. the fuel gas delivery pressure and temperature;

ii. the fuel gas moisture range;

iii. the purge gas usage range;

iv. the condensate (liquid fuel) separation range;

v. the combustion zone temperature range. This is required for all devices that measure this parameter;

vi. the excess combustion air range;

vii. the flame arrestor(s);

viii. the burner manifold pressure;

ix. the pilot flame sensor;

x. the pilot flame design fuel and fuel usage;

xi. the tip velocity range;

xii. the Momentum flux ratio;

xiii. the exit temperature range;

xiv. the exit flowrate; and

xv. the wind velocity and direction.

The test report shall include all calibration quality assurance/quality control data, calibration gas values, gas cylinder certification, strip charts, the test times, and calibration values.

(Authority for term: OAC rule 3745-77-07(C)(1)) and 40 CFR 63.1282(g)(8))

(9) If the permittee is using a combustion control device model tested under 40 CFR 63.1282(g) by the manufacturer, and the test results for that model have not been posted by the manufacturer at the website identified at: epa.gov/airquality/oilandgas/, then an electronic copy of the performance test results shall be submitted by the permittee via e-mail to Oil_and_Gas_PT@EPA.GOV.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(d)(1)(ii))

(10) Within 60 days following the date of completing each performance test (required to demonstrate compliance with Part 63 Subpart HHH), the permittee must submit the test results to U.S. EPA's WebFIRE database using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), www.epa.gov/cdx . Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT), found at http://www.epa.gov/ttn/chief/ert/index.html. Only data collected using test methods identified on the ERT Website are subject to this requirement

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(g))

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:

0.13 lb/hr and 0.007 ton/yr of SO_2.

Applicable Compliance Method:

The hourly emission rate was derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.057 lb SO_2/mmBtu (20 gr S/100scf) multiplied the 1.33 mmBtu/hr NAO flare plus the product of an emission factor of 0.057 lb/mmBtu (20 g S/100 scf) multiplied by 1.0 mmBtu/hr NAO reboiler burner.

The annual limitation was established based on an average annual sulfur concentration of 0.25 grains S per 100 cubic feet of natural gas. Therefore, compliance with the annual emission limitation shall be determined based on the emission factor of 0.000714 lb SO_2/mmBtu for the flare and reboiler. The annual limitation was established by multiplying this annual average hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6C.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

0.77 lb/hr and 3.37 TPY of VOC.

Applicable Compliance Method:

The hourly emission rate was derived using the Gas Research Institute simulation program, GLYCalc version 3, based on wet gas analyses of the gases

assuming a dehydrator gas feed rate of 125 mmscf/day multiplied by 0.02 representing 98% flare destruction efficiency (0.74 lb VOC/hr controlled emissions) plus the product of an emission factor of 0.014 lb VOC/mmBtu (AP-42 Tbl 13.5-1, 1/95; 10% of THC assumed to be VOC) multiplied by 1.33 mmBtu/hr NAO flare burner rate plus the product of an emission factor of 0.005 lb VOC/mmBtu (AP-42 Tbl 1.4-2, 7-98) multiplied by 1.0 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hr/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be assumed provided compliance is maintained with the hourly limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

0.19 lb/hr and 0.83 TPY of NOx.

Applicable Compliance Method:

The hourly emission rate was derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.068 lb NOx/mmBtu (AP-42, Tbl 13.5-1, 1/95) multiplied by the 1.33 mmBtu/hr NAO flare plus the product of an emission factor of 0.098 lb NOx/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 1.0 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

0.57 lb/hr and 2.50 TPY of CO.

Applicable Compliance Method:

The hourly emission rate was derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.37 lb CO/mmBtu (AP-

42, Tbl 13.5-1, 1/95) multiplied by 1.33 mmBtu/hr NAO flare plus the product of an emission factor of 0.0824 lb CO/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 1.0 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

0.004 lb/hr and 0.018 ton/yr of PM.

Applicable Compliance Method:

The hourly emission rate was derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by the 1.33 mmBtu/hr NAO flare plus the product of an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by 1.0 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, provided compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f. Emission Limitation:

Visible particulate emissions from the boiler stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

g. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.0019 lb PM10/mmBtu multiplied by 1.0 mmBtu/hr NAO reboiler burner. The emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 1: External Combustion Sources, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-10(B)(1), OAC rule 3745-17-03(B)(9), and OAC rule 3745-77-07(C)(1))

h. Emissions Limitations:

BTEX emissions from the existing small glycol dehydration unit(s) shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii); or, if it can be demonstrated, may meet this limit without controls:

For new units:

$EL_{BTEX} = 3.10 \times 10^{-4} \times \text{throughput} \times C_{i,BTEX} \times 365 \text{ days/yr} \times 1\text{Mg}/1{,}000{,}000 \text{ g}$

Where:

EL_{BTEX} = unit-specific BTEX emission limit, Mg/yr

3.10×10^{-4} = BTEX emission limit for new units, g BTEX/scm – ppmv

Throughput = annual average daily natural gas throughput, scm/day

$C_{i,BTEX}$ = average annual BTEX concentration of natural gas at the inlet to the glycol dehydration unit, ppmv.

Applicable Compliance Method:

The permittee, demonstrating compliance through performance testing to meet the applicable emission standard, shall do so using the following methods and

procedures in accordance with 40 CFR 63.1282(c)(2) if uncontrolled or 40 CFR 63.1282(d) if controlled:

i. Method 1 or 1A, as appropriate, at 40 CFR Part 60, Appendix A shall be used for selection of the sampling sites. Any references to particulate mentioned in Methods 1 and 1A do not apply. To determine compliance with the BTEX limitation, sampling sites shall be located at the outlet of the final control device or, if compliance can be demonstrated with no controls, at the process vent of the glycol dehydration dehydrator.

ii. Method 2, 2A, 2C, or 2D, as appropriate, at 40 CFR Part 60, Appendix A shall be used to determine the gas volumetric flowrate.

iii. The integrated sampling and analysis procedures of Method 3A or 3B at 40 CFR Part 60, Appendix A, or other method otherwise approved by the Administrator, shall be used to determine the oxygen concentration, where a correction factor is required for excess air.

iv. Method 18 at 40 CFR Part 60, Appendix A, ASTM D6420–99 (2004) (Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry), or other method otherwise approved by the Administrator, shall be used to determine BTEX emissions, in kilograms/hour, as determined in 40 CFR 63.1282(d)(3)(v) using the following procedures and calculated as follows:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of 4 grab samples shall be taken. If grab sampling is used, the samples shall be taken at approximately equal intervals in time, i.e., every 15-minute intervals during the run.

(b) The mass rate of BTEX (Eo) shall be computed using the following equation:

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj}\right) Q_o$$

Where:

Eo= Mass rate of BTEX at the outlet of the control device, dry basis, kilogram per hour.

Coj= Concentration of sample component j of the gas stream at the outlet of the control device, on a dry basis, parts per million by volume.

Moj= Molecular weight of sample component j of the gas stream at the outlet of the control device, gram/gram-mole.

Qo= Flowrate of gas stream at the outlet of the control device, dry standard cubic meter per minute.

K_2= Constant, 2.494×10^{-6} (parts per million) (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in sample.

v. Only BTEX compounds measured by Method 18 from 40 CFR Part 60, Appendix A, or ASTM D6420–99 (2004) shall be summed using the equation above, as specified in 40 CFR 63.1282(c)(2)(iii) for uncontrolled units or in 40 CFR 63.1282(d)(3)(v) for controlled units;

vi. The mass rate of BTEX at the outlet of the glycol dehydration unit process vent may be calculated using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and shall be determined using the procedures documented in the Gas Research Institute (GRI) report entitled ‘‘Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions’’ (GRI–95/0368.1), and all BTEX measured by Method 18 or ASTM D6420–99 shall be summed;

vii. Method 25A, 40 CFR Part 60, Appendix A shall be used for estimated VOC emissions.

viii. Operating parameters shall be established in accordance with 40 CFR 63.1283(d), as applicable to the chosen control device, during the performance test to demonstrate continuous compliance.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1281(f)(1), 40 CFR 63.1282(a), (c), through (d)(3)(v), and 40 CFR 63.1283(d))

i. An initial performance test shall be conducted within 180 days after the compliance date, or by 4/13/15 for existing small glycol dehydration units, except that the initial performance test for existing units demonstrating compliance using a combustion control device (i.e., a combustion control device installed on or before August 23, 2011) at major sources shall be conducted no later than 10/15/15.

The first periodic performance test shall be conducted no later than 60 months after the initial performance test is required to be conducted. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source

desires to establish a new operating limit. The periodic performance test results must be submitted in the next Semiannual Report as specified in 40 CFR 63.1285(e)(2)(x). Combustion control devices meeting the following criteria are not required to conduct periodic performance tests:

i. a combustion control device whose model is tested by the manufacturer and is meeting the criteria of 40 CFR 63.1282(g), or

ii. a combustion control device demonstrating, during the initial performance test conducted under 40 CFR 63.1282(d), the combustion zone temperature is an indicator of the destruction efficiency and is operated at a minimum temperature of 760 degrees C.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1282(d)(3)(vi))

j. Emissions Limitation:

Closed Vent Systems.

Where meeting the emissions standard using a control device, the gas stream from the glycol dehydration unit(s) process vents shall be routed through a closed-vent system to a control device meeting the requirements of 40 CFR 63.1281(c) and (d). The closed-vent system shall be designed and operated with no detectable emissions. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background.

Applicable Compliance Method:

Initial and annual visual inspections of the closed vent system shall meet the requirements of 40 CFR 63.1283(c) and shall be conducted in accordance with the test procedure set forth in Method 21 of 40 CFR Part 60, Appendix A and as identified in 40 CFR 63.1282(b). The detection of leaks of VOC into the ambient air from equipment and background level shall be determined as follows:

i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21 and the instrument shall be calibrated each day before use.

ii. The following calibration gases shall be used:

(a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and

(b) a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.

All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm

for determining compliance. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background (per 40 CFR 63.1282(b)(8)).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1281(c), 40 CFR 63.1282(b), and 40 CFR 63.1283(c))

k. Emissions Limitation:

Control Device Requirements.

Unless it can be demonstrated that the uncontrolled BTEX emissions from the process vents of the glycol dehydration unit(s) can met the appropriate standard calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the requirements of 40 CFR 63.1282(c)(2), the mass content of BTEX from the glycol dehydration unit, in the gases vented to the control device, shall be reduced to meet the limit calculated in 40 CFR 63.1275(b)(1)(iii),as determined in accordance with the requirements of 40 CFR 63.1282(d)(3)(v).

Applicable Compliance Method:

Emissions from the glycol dehydration unit shall be vented through a closed vent system meeting the requirements of 40 CFR 63.1281(c) and to a control device meeting the requirements of 40 CFR 63.1275 and 40 CFR 63.1281(f); and the control device shall meet the following requirements:

i. An open flare used to demonstrate compliance shall be designed and operated in accordance with 40 CFR 63.1282(d)(2) and 40 CFR 63.11(b); and it must be equipped with a heat sensing monitoring device and recorder that indicates the continuous ignition of the pilot flame per 40 CFR 63.1283(d)(3)(i)(C);

ii. A demonstration of compliance using a combustion device or enclosed flare shall be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3), and it must be equipped with a continuous temperature monitoring device which shall be used to establish a minimum operating temperature in accordance with 40 CFR 63.1282(e) and 40 CFR 63.1283(d);

iii. A demonstration of compliance using a condenser may be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3); or a design analysis may be used in accordance with 40 CFR 63.1282(d)(4); or a condenser performance curve may be generated using the GRI-GLYCalc^{TM} model in accordance with 40 CFR 63.1282(d)(5) and (f). The condenser must be equipped with a continuous parameter monitoring device and must establish a minimum or maximum operating parameter in accordance with 40 CFR 63.1283(d); and

iv. A demonstration of compliance using a carbon adsorption system shall be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3), and it must be equipped with a continuous parameter monitoring device which shall be used to establish minimum or maximum operating parameters in accordance with 40 CFR 63.1283(d)(3)(i)(F) for the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle, the average carbon bed temperature for the duration of the carbon bed steaming cycle, and the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle; or alternatively the carbon replacement for non-regenerative carbon may be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(G).

v. Potential BTEX emissions estimates shall be based on the maximum glycol circulation rate(s), in gallons per minute (gpm); the worst case pollutant concentrations from representative extended gas analyses of the inlet wet gas; and the maximum natural gas flow rate, as determined by 40 CFR 63.1282(a)(1)(i); or for a new unit, potential emissions shall be estimated in accordance with 40 CFR 63.1270(a) and increased by a factor of 1.2.

vi. Where a control device is required to meet the BTEX limit, the gas stream from the glycol dehydration unit process vent shall be routed through a closed-vent system to control device that meets the requirements of 40 CFR 63.1281(f).

vii. The actual flowrate of natural gas to the glycol dehydration unit(s) shall be made by installing a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2% or better. The annual natural gas flowrate shall be converted to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processes natural gas.

viii. A performance test conducted by the manufacturer of a combustion control device may be used to demonstrate compliance if:

(a) the manufacturer has demonstrated compliance for the specific model in accordance with all of the requirements contained in 40 CFR 63.1282(g);

(b) the actual average inlet waste gas flowrate does not exceed the maximum established by the manufacturer and is determined using the model GRI-GLYCalc version 3.0 or higher, ProMax, or AspenTech HYSYS, where inputs to the models are representative of actual operating conditions of the controlled unit(s);

(c) a heat sensing device, equipped with a continuous recorder, is installed that indicates continuous ignition of the pilot flame;

(d) the combustion control device is operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour of operation; and 1-hour visible emissions readings, using Method 22 at 40 CFR Part 60, Appendix A-7, are conducted quarterly; and

(e) the permittee develops an inspection and maintenance plan for the combustor which shall include the manufacturer's recommendations for ensuring proper operations; and semiannual inspections are conducted with maintenance and replacement of components in accordance with the plan.

In accordance with 40 CFR 63.1282(d)(3)(iii)(B)*(4)* for controlled and 63.1282(c)(2)(iii) for uncontrolled small glycol dehydration units, the GRI-GLYCalc™ model, Version 3.0 or higher, can be used to calculating the mass rate of BTEX.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1275(c)(3)(iii), 40 CFR 63.1281(f), 40 CFR 63.1282, and 40 CFR 63.1283(b) through (d))

l. Where using a condenser as a control device the permittee shall establish a condenser performance curve using one of the following methods and in accordance with 40 CFR 1283(d)(5)(ii):

i. If using a condenser design analysis, in accordance with the requirements of 40 CFR 63.1282(d)(4), a condenser performance curve and the minimum or maximum operating parameter value(s) shall be established based on the design analysis which may be supplemented by the manufacturer's recommendations.

ii. If conducting a performance test, in accordance with the requirements of 40 CFR 63.1282(d)(3), the condenser performance curve shall be based on values measured during the performance test and supplemented as necessary by the condenser design analysis or the manufacturer's recommendations or both.

iii. As an alternative to using the condenser design analysis, the permittee may use the procedures documented in the GRI report entitled ''Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions'' (GRI–95/0368.1) as inputs for the model GRI-GLYCalc™, Version 3 or higher, to generate a condenser performance curve.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

m. Where demonstrating compliance using a condenser's design analysis, the permittee shall establish the relationship between the condenser performance curve and the condenser outlet temperature; and the control efficiency shall be determined as follows:

i. The design analysis shall include the vent stream composition, constituent concentrations, flowrate, relative humidity, and temperature, and shall establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

ii. Following 30 days of operations, the permittee shall calculate the 30-day average BTEX emission reduction necessary to meet the BTEX limit using the following procedures:

(a) monitor and calculate the daily average condenser outlet temperature in accordance with 40 CFR 63.1283(d)(4);

(b) determine the condenser efficiency for each operating day using the daily average condenser outlet temperature and the condenser performance curve; and

(c) at the end of each operating day, calculate the 30-day BTEX emission reduction from the condenser efficiencies for the preceding 30 operating days.

iii. Compliance is achieved if the average BTEX emission reduction calculated for each 30-day average is equal to or greater than the minimum percent reduction necessary to meet the BTEX limit.

If the permittee uses a combination of process modification(s) and a condenser in accordance with the requirements of 40 CFR 63.1281(e), the 30-day BTEX emission reduction shall be calculated using the emission reduction achieved through process modifications and the condenser efficiency as determined above, both for the previous 30 operating days. Or if it is determined that the design analysis is not sufficient to demonstrate compliance, the permittee shall be required to conduce a performance test to demonstrate compliance with the BTEX limit and to identify the minimum percent reduction necessary to meet the BTEX limit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1282(f), 40 CFR 63.1281(f)(1)(ii), 40 CFR 63.1282(d)(4) though (5), and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

n. The maximum annual facility natural gas throughput shall be calculated as follows:

Throughput = 8760 / ($1/IR_{max}$ + $1/WR_{max}$)

Where:

Throughput = the maximum annual facility wide natural gas throughput in cubic meters per year

IR_{max} = maximum facility injection rate in cubic meters per hour

WR_{max} = maximum facility withdrawal rate in cubic meters per hour

8760 = maximum hours of operation per year.

A facility that only transports natural gas, a facility that increases its throughput above the throughput calculated above, and/or a new facility estimating the operational natural gas throughput before startup shall calculate the maximum natural gas throughput as the highest annual natural gas throughput times a factor of 1.2.

(Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR 63.1270(a)(1), (2), through (3))

o. Emissions Limitation:

Compliance using an open flare.

There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation and the flare shall be designed and operated in accordance with 40 CFR 63.11(b).

Applicable Compliance Method:

Compliance with the visible emissions limitation shall be determined in accordance with U.S. EPA Method 22 in Appendix A of 40 CFR Part 60. The heat content, flowrate, and exit velocity shall be determined in accordance with 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1281(d)(1)(iii), and 40 CFR 63.1282(d)(2))

g) Miscellaneous Requirements

(1) The permittee shall meet the applicable requirements of the most current version of 40 CFR Part 63 Subpart HHH following any amendments to these rules, which may supersede any requirements identified in this permit.

8. B027, Recip Engine/Air Compr #099A1

Operations, Property and/or Equipment Description:

4SRB Waukesha F817G Recip Engine COMPR #099A1, 118 Brake HP, Product Rating 107 HP. ACP

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) (P0116355, as issued 4/14/2014)	Emissions shall not exceed: 0.07 lb/hr and 0.007 TPY of SO_2, 0.04 lb/hr and 0.15 TPY of VOC, 2.76 lbs/hr and 10.97 TPY of NOx, 4.64 lbs/hr and 18.47 TPY of CO, and 0.024 lb/hr and 0.018 TPY of PM.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE), from the emissions unit, shall not exceed 0.310 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)a. below.
e.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)b. below.
f.	40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)c., b)(2)d., c)(2), d)(2), e)(4), f)(1)c., and g)(1). below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. Table 8 to Subpart ZZZZ of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart ZZZZ of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

c. Following the compliance date of the NESHAP, the permittee shall limit the concentration of formaldehyde from the stationary RICE exhaust to 10.3 ppmvd or less at 15% O_2 at the outlet of the control device or from the exhaust stack of the engine.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.6602, 40 CFR 63.6640(a), and 40 CFR Part 60, Subpart ZZZZ, Table 2c #11)

d. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6595(a)(1)	The compliance date for Part 63 Subpart ZZZZ for existing SI RICE was 10/19/13.
Applicable Tables from Part 63, Subpart ZZZZ	Emission limit in Table 2c #11; performance test methods in Table 4 #3; initial compliance demonstration in Table 5 #12; reporting requirements/frequency in Table 7; general provisions from Subpart A in Table 8.
40 CFR 63.6602	Maintain compliance with the emission limitation in Table 2c #11 (limit formaldehyde to 10.3 ppmvd at 15% O_2) to Part 63 Subpart ZZZZ.
40 CFR 63.6602; 40 CFR 63.6612; and 40 CFR 63.6620	Conduct an initial performance test within 180 days following the compliance date or by 4/17/14, to demonstrate compliance with the formaldehyde emission standard and in accordance with the requirements specified in Tables 4 and 5 to the subpart.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the SI RICE, as identified in Table 8 to Subpart ZZZZ.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6635	Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. Must use all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) in calculations used to report emissions or operating levels.
40 CFR 63.6655(a)	Keep records of: 1. each notification and report submitted to comply with Subpart ZZZZ; 2. the occurrence and duration of each malfunction of the RICE and any control or monitoring equipment; 3. corrective actions taken during each period of malfunction to minimize emissions and restore normal operations; 4. records of performance tests; and 5. all required maintenance performed on air pollution control and monitoring equipment.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

(3) A comprehensive written report on the results of the performance tests, conducted to demonstrate compliance with 40 CFR 63.6602, shall be signed by the person or persons responsible for the tests and submitted to Ohio EPA, Central 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 Ohio EPA, Central District Office.

[OAC rule 3745-15-04(A)]

(4) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6640(b)	Submit a report of each instance in which the emission limitation in Table 2c was not met; these deviations to be reported according to the requirements of 63.6650.
40 CFR 63.6640(e)	Submit a report of each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.
40 CFR 63.6645(a)(1)	Submit all notifications required per 63.7(b) and (c); 63.8(e), (f)(4), and (f)(6); and 63.9(b) through (e), (g), and (h) that apply to the SI RICE.
40 CFR 63.6645(g)	Submit a Notification of Intent to conduct a performance test at least 60 days before the test is scheduled to begin, as required by 63.7(b)(1).
40 CFR 63.6645(h); 40 CFR 63.6630(c); and OAC rule 3745-15-04(A)	Submit a Notification of Compliance Status for each initial compliance demonstration required in Table 5 to Subpart ZZZZ, including the performance test results, before the close of business on the 60th day following the completion of the test; or within 30 days of the initial compliance demonstration if the demonstration does not include a performance test. OAC rule 3745-15-04(A) requires performance test results to be submitted within 30 days of the test date unless additional time is requested.
40 CFR 63.6650(a)	Submit each applicable report in Table 7 of Subpart ZZZZ.
40 CFR 63.6650(b)(1) to (5)	Following the initial compliance date, submit

and Part 63 Subpart ZZZZ Table 7 #1	Semiannual Compliance Reports to include the information identified in 63.6650(c) through (f), as applicable to the SI RICE. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1st through June 30th and July 1st through December 31st. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31st and January 31st.
40 CFR 63.6650(c)	63.6650(c) contains the required information to be submitted in each compliance report.
40 CFR 63.6650(d)	63.6650(d) contains the required information to be submitted for each deviation from an emission or operating limitation not monitored by a continuous monitoring system (CMS).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

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:

0.072 lb/hr and 0.004 TPY of SO_2.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.00061 lb SO_2/bhp-hr (20 grains S per 100 cubic foot natural gas@10,600 Btu/hp-hr)) multiplied by horsepower rating of engine (118 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.0000076 lb SO_2/bhp-hr (0.25 grains S per 100 cubic foot natural gas@10,600 Btu/hp-hr)) multiplied by horsepower rating of engine (107 horsepower) multiplied by the annual hours of operation (8760 hrs/yr) and divided by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6C.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

0.04 lb/hr and 0.15 TPY of VOC.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.000314 lb VOC/bhp-hr) multiplied by horsepower rating of engine (118 brake

horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.000314 lb VOC/ bhp-hr) multiplied by horsepower rating of engine (107 horsepower) multiplied by the annual hours of operation (8760 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.000314 lb VOC/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

2.76 lbs/hr and 10.97 TPY of NOx.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.0234 lb NOx/bhp-hr) multiplied by horsepower rating of engine (118 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.0234 lb NOx/bhp-hr) multiplied by horsepower rating of engine (107horsepower) multiplied by the annual hours of operation (8760 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.0234 lb NOx/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

4.64 lbs/hr and 18.47 TPY of CO.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.0394 lb CO/bhp-hr) multiplied by horsepower rating of engine (118 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.0394 lb CO/bhp-hr) multiplied by horsepower rating of engine (107 horsepower) multiplied by the annual hours of operation (8760 hr/yr) and divided by 2000 lbs/ton. The emission factor, 0.0394 lb CO/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

0.024 lb/hr and 0.094 TPY of PM.

Applicable Compliance Method:

Compliance with the hourly emission limitation is derived from the emission factor (0.000201 lb PM/bhp-hr) multiplied by horsepower rating of engine (118 brake horsepower). Compliance with the annual emission limitation is derived from the emission factor (0.000201 lb PM/bhp-hr) multiplied by horsepower rating of engine (107 horsepower) multiplied by the annual hours of operation (8760 hrs/yr) and divided by 2000 lbs/ton. The emission factor, 0.000201 lb PM/bhp-hr, is derived from U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

f. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth

Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

10.3 ppmvd formaldehyde at 15% O_2

Applicable Compliance Method:

An initial performance test was completed for emissions unit B027 on November 20, 2013 meeting the requirements of 40 CFR 63.6612. Should modifications to the emissions unit occur, compliance with the emissions limit of 10.3 ppmvd formaldehyde at 15% O_2, as established with the initial performance test, must be demonstrated. The modifications to the emissions unit may necessitate a performance test. Any future performance tests should be conducted consistent with the following terms and conditions.

The performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The engine percent load, during the performance test, shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.

The following test methods shall be employed to demonstrate compliance with the emission limitation for formaldehyde:

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

ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00: to measure O_2 at the inlet and outlet of the control device if demonstrating compliance through the percent control of CO or to determine the O_2 concentration of the stationary RICE exhaust to normalize the CO concentration.

iii. 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 inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.

iv. Method 320 or Method 323 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure formaldehyde at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure formaldehyde at the exhaust of the stationary RICE.

v. The following equation shall be used to normalize the formaldehyde concentrations to a dry basis and to 15 percent oxygen (O_2)**:

$C_{adj} = C_d (5.9 / (20.9 - \% O_2))$

Where:

C_{adj}= calculated formaldehyde concentration adjusted to 15 percent O_2.

C_d= measured concentration of formaldehyde, uncorrected.

5.9 = 20.9 percent O_2 − 15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = measured O_2 concentration, dry basis, percent.

** Optionally, the pollutant concentrations can be corrected to 15% O_2 using a CO_2 correction factor, by calculating the fuel factor (F_o value) using Method 19 results obtained during the performance test (40 CFR 63.6620(e)(2)).

The permittee shall notify the Director (Ohio EPA, DAPC, Central District Office) in writing of the scheduled performance test date at least 60 calendar days before it is scheduled, to allow the agency time to review and approve the site-specific test plan and to arrange for an observer to be present during the compliance demonstration.

Personnel from Ohio EPA, Central 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.

(Authority for term: [40 CFR 63.7(a)(2), (b)(1), and (e)(3)], [40 CFR 63.6602], [40 CFR 63.6612], [40 CFR 63.6620], [40 CFR 63.6630], [40 CFR 63.6645(a)(1)], [Part 63, Subpart ZZZZ, Table 2c #11; Table 4 #3; and Table 5 #12], and [OAC rule 3745-15-04(A)])

g) Miscellaneous Requirements

(1) Any amendment to Part 63, Subpart ZZZZ shall supersede the Subpart ZZZZ compliance limitations and/or compliance options contained in this permit.

9. B032, TEG Dehydration Unit No.3

Operations, Property and/or Equipment Description:

Gas Conditioners Inc. 13 mmscf/day Natural Gas Dehydrator System: Two Absorber Towers & Regenerator Still including a 0.5 mmBtu/hr NAO Reboiler (BLR5) and 0.623 mmBtu/hr flare (FLLP3). TEG Dehy No.3.

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) (P0116355, as issued 4/14/2014)	Emissions shall not exceed: 0.064 lb/hr and 0.004 TPY of SO_2, 0.09 lb/hr and 0.40 TPY of VOC, 0.09 lb/hr and 0.40 TPY of NOx, 0.27 lb/hr and 1.18 TPY of CO, and 0.002 lb/hr and 0.014 TPY of PM.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the boiler stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the boiler stack shall not exceed 0.020 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(G)	See b)(2)f. below.
e.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)g. below.
f.	40 CFR Part 63, Subpart HHH (National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage)	In accordance with 40 CFR 63.1275 and 40 CFR 63.1281, the small glycol dehydration unit at a major source of HAP shall be limited to emissions of benzene, toluene, ethyl benzene, and xylene

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(BTEX) as determined in Equation 1 for existing units in 40 CFR 63.1275(b)(1)(iii).
g.	40 CFR 63.1275(c)(1)	As an alternative, the process vent(s) from the glycol dehydration unit(s) may be connected to a process natural gas line through a closed vent system. See b)(2)h. and i.
h.	40 CFR 63.1282(d)(2) and 40 CFR 63.11(b)(4)	There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation.

(2) Additional Terms and Conditions

a. The emissions unit shall be equipped with a flare to control organic compound emissions. The flare shall be fired with natural gas.

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

b. The flare shall be designed and operated in a manner that will ensure no visible emissions, as determined by 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

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

c. The flare shall be operated at all times when emissions may be vented to it as determined by methods specified in 40 CFR 60.18(f).

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

d. The flare shall be used only when the net heating value of the gas being combusted is 200 Btu/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f).

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

e. The flare shall be designed for and operated with an exit velocity that satisfies the requirements of 40 CFR 60.18(f).

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

f. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

g. Table 2 to Subpart HHH of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart HHH of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

h. For each existing small glycol dehydration unit, installed on or before 8/23/11, BTEX emissions shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii). If no control device is needed to comply with the BTEX limit, compliance is demonstrated as specified in 40 CFR 63.1282(c)(2).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1275(b)(1)(iii), and 40 CFR 63.1275(c)(3)(iii))

i. The BTEX emission limit may be met through the use of one of the following methods:

i. connecting the process vent(s) of the glycol dehydration unit(s) through a closed vent system designed and operated in accordance with 40 CFR 63.1281(c), to a control device(s) designed and operated in accordance with 40 CFR 63.1281(f);

ii. process modifications meeting the requirements of 40 CFR 63.1281(e); or

iii. using a combination of process modifications and control device(s) meeting the requirements of 40 CFR 63. 1281(f) and closed vent system meeting the requirements of 40 CFR 63.1281(c); or

iv. demonstrate that the BTEX emissions limit is met through actual uncontrolled operation of the small glycol dehydration unit.

Operational parameters shall be documented in accordance with the requirements specified in 40 CFR 63.1283(d) and the BTEX emissions determined in accordance with the requirements specified in 40 CFR 63.1282(a)(2).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1275(b)(1)(iii)(A) through (D))

j. The control device for small glycol dehydration units used to meet BTEX the emission limit calculated in 40 CFR 63.1275(b)(1)(iii) shall be one of the following:

i. An enclosed combustion device (e.g., thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) that is designed and operated to meet the levels specified below:

(a) The mass content of BTEX in the gases vented to the device is reduced as determined in accordance with the requirements of 40 CFR 63.1282(d).

(b) The concentration of either TOC or total HAP in the exhaust gases at the outlet of the device is reduced to a level equal to or less than 20 parts per million by volume on a dry basis corrected to 3 percent oxygen as determined in accordance with the requirements of 40 CFR 63.1282(e).

If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

ii. A vapor recovery device (e.g., carbon adsorption system or condenser) or other non-destructive control device that is designed and operated to reduce the mass content of BTEX in the gases vented to the device as determined in accordance with the requirements of 40 CFR 63.1282(d).

iii. A flare, as defined in 40 CFR 63.1271, that is designed and operated in accordance with the requirements of 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(f)(1))

k. Where using a flare, as defined in 40 CFR 63.1271, for compliance, there shall be no visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours; and the compliance determination shall be conducted using Method 22 of CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(d)(2), 40 CFR 63.1281(f)(1)(iii), and 40 CFR 63.11(b)(4))

l. The permittee shall prepare a site-specific monitoring plan for each continuous parameter monitoring system (CPMS), required for compliance, that addresses the monitoring system design, data collection, quality assurance, and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d). Each CPMS shall be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan; and the permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. Performance checks, system accuracy audits, or other audits required by the plan shall be conducted at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1283(d)(1)(ii))

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))

Applicable Rule	Requirement
40 CFR 63.1275 and 40 CFR 63.1281(c) and (f)	Design and operational requirements for a closed-vent system and the control device used to comply with 40 CFR 63.1274(c)(1).
40 CFR 63.1281(c)(3); and 40 CFR 63.1283(c)(2)(iii)	Each bypass device to a closed-vent system meeting the requirements of 40 CFR 63.1281(c) must be installed with a flow indicator which takes a reading once every 15 minutes and is installed with an alarm (for any bypass); or must install a car-seal or lock-and–key mechanism on the bypass device to maintain the bypass valve in a closed position.
40 CFR 63.1281(f)(1)(iii); and 40 CFR 63.1282(d)(2).	A flare, used to demonstrate compliance with 40 CFR 63.1275(b)(1)(iii), must be designed and operated in accordance with 40 CFR 63.11(b).
40 CFR 63.1281(f)(1)(ii)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with 40 CFR 63.1282(f) and the performance test conducted in accordance with 63.1282(d).
40 CFR 63.1281(f)(1)(ii), (d)(4), and (d)(5)	A carbon adsorber used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the performance test conducted in accordance with 63.1282(d). The spent carbon must be monitored, regenerated, reactivated, or burned as required in 40 CFR 63.1281(d)(5).
40 CFR 63.1281(f)(1)(i)	A combustion device, other than a flare, used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be designed and operated to reduce the mass content of BTEX in the gases vented to it to the level calculated in 40 CFR 63.1275(b)(1)(iii) or designed to reduce TOC or total HAP in the exhaust gases to a level equal to or less than 20 ppm by volume on a dry basis corrected to 3% O_2 as determined in accordance with 40 CFR 63.1282(d).

40 CFR 63.1281(f)(2)(i)	Each control device used to comply with Part 63 Subpart HHH shall be operated at all times emissions are vented from the glycol dehydration unit(s), and through a closed vent system as required by rule.
40 CFR 63.1274(h)	The glycol dehydration unit and any required control and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart HHH)

(2) Where the demonstration of compliance for a combustion control device is tested by the manufacturer, under the provisions of 40 CFR 63.1282(g), the permittee shall demonstrate that a control device achieves the performance requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii), by installing a device tested and certified by the manufacturer and complying with the following criteria:

a. The inlet gas flowrate shall meet the range specified by the manufacturer. Flowrate shall be calculated as specified in 40 CFR 63.1283(d)(3)(i)(H)(*1*).

b. A pilot flame shall be present at all times of operation. The pilot flame shall be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(H)(*2*).

c. Devices shall be operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour. A visible emissions test using Method 22, 40 CFR Part 60, Appendix A, shall be performed each calendar quarter. The observation period shall be 1 hour and shall be conducted according to EPA Method 22, 40 CFR Part 60, Appendix A.

d. Compliance with the operating parameter limit is achieved when the following criteria are met:

i. the inlet gas flowrate is equal to or below the maximum established by the manufacturer;

ii. the pilot flame is present at all times;

iii. during the visible emissions test performed under 40 CFR 63.1282(h)(3), the duration of visible emissions does not exceed a total of 2 minutes during the observation period.

(a) Devices failing the visible emissions test shall follow manufacturers repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation.

(b) All repairs and maintenance activities for each unit shall be recorded in a maintenance and repair log and shall be available on site for inspection.

iv. Following return to operation from maintenance or repair activity, each device must pass a Method 22 visual observation as described in 40 CFR 63.1282(h)(3).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(h), 40 CFR 63.1282(d), 40 CFR 63.1283(d)(3)(i)(H), and 40 CFR 63.1283(d)(5)(i)(C))

(3) The permittee may document the conditions for which glycol dehydration unit baseline operations shall be modified to achieve the BTEX limit determined in 40 CFR 63.1275(b)(1)(iii), either through process modifications or through a combination of process modifications and one or more control devices. If a combination of process modifications and one or more control devices are used, the permittee shall also establish the emission reduction to be achieved by the control device to meet the BTEX limit for the small glycol dehydration unit process vent. Only modifications in glycol dehydration unit operations directly related to process changes, including but not limited to changes in glycol circulation rate or glycol-HAP absorbency, shall be allowed. Changes in the inlet gas characteristics or natural gas throughput rate shall not be considered in determining the overall emission reduction due to process modifications.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(2))

(4) The permittee that meets the BTEX limit using process modifications alone shall maintain records to document that the facility continues to operate in accordance with the conditions under which the glycol dehydration unit(s) was/were demonstrated to attain the limit. The permittee that meets the BTEX limit using a combination of process modifications and one or more control devices shall also meet the control device requirements for small glycol dehydration units as identified in 40 CFR 63.1281(f) and the BTEX standard must be met.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1281(e)(3))

(5) Each control device used to comply with the requirements of Part 63 Subpart HHH shall be operated at all times when gases, vapors, and fumes are vented from the glycol dehydration unit, and through the closed-vent system to the control device as required under 40 CFR 63.1275. More than one unit may be vented to a control device.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(2)(i), and 40 CFR 63.1275(b)(1)(iii))

(6) For each control device monitored to demonstrate continuous compliance in accordance with the requirements of 40 CFR 63.1283(d), the permittee shall maintain the daily average of the parameter value at either equal to or greater than the minimum or equal to or less than the maximum monitoring value established during the performance test.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1282(e)(3), and 40 CFR 63.1283(d)(5))

(7) For each carbon adsorption system used to demonstrate compliance with the BTEX limit, the carbon shall be monitored; and it shall be replaced or regenerated, reactivated, or burned in a thermal treatment unit, incinerator, boiler, or industrial furnace that meets the applicable requirements of the unit identified in 40 CFR 63.1281(d)(5)(ii). Carbon

shall be replaced with fresh carbon on a regular predetermined time interval that is no longer than the service life of the carbon adsorption system.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.1281(f)(3), and 40 CFR 63.1281(d)(5))

(8) The glycol dehydration unit and any required control and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.1274(h))

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))

(2) The flare shall be monitored for the presence of a pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.

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

(3) The permitttee shall record the following information each month:

a. All periods during which there was no pilot flame; and

b. The operating times for the flare, monitoring equipment, and the associated emissions unit.

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

(4) The following monitoring and recordkeeping requirements are applicable to the glycol dehydration unit(s):

	Applicable Rule	Requirement
a.	40 CFR 63.1270(a)(1)	The owner or operator of the small glycol dehydration unit shall maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year.
b.	40 CFR 63.1283(c)	Inspection requirements for a closed-vent system for a dehydration unit subject to control.
c.	40 CFR 63.1284(b)(5) through (8)	Records required for each inspection of the closed-vent system for a dehydration unit subject to control.
d.	40 CFR 63.1283(d)(3)(i)(C) and	Where a flare is used to comply with the requirements of 40 CFR 63.1274(c), it must be equipped with a continuous recorder for the

	40 CFR 63.1284(e)	thermocouple or a heat sensing monitoring device for the pilot flame. A record must be maintained of: all periods of time when the pilot flame is out when process gas is being vented to it; all required visible emission readings; the flare design; and the heat content, flowrate, and exit velocity determinations.
e.	40 CFR 63.1283(c)(2)(iii); 40 CFR 63.1283(d)(6)(iv); and 40 CFR 63.1281(c)(3)(i)	A record shall be maintained for: the flow indicator readings for each bypass device to the closed-vent system and/or a record of the monthly inspection of the car-seal/lock-and–key mechanism on the bypass device, and a record of each detected bypass.
f.	40 CFR 63.1282(b),(d),(e), and (f); and 40 CFR 63.1284(a),(b), and (e) For 40 CFR 63.1274(c)	Must maintain the records required to demonstrate compliance, i.e., leak detection results demonstrating no detectable emissions from the closed-vent system and the appropriate performance test and emission test data of the control device.
g.	40 CFR 63.1282(e) and (f); 40 CFR 63.1283(d); and 40 CFR 63.1284(b)(4)	If using an enclosed combustion or vapor recovery device to demonstrate compliance with Part 63, Subpart HHH, the maximum or minimum monitoring parameter values must be recorded and maintained in accordance with these paragraphs.
h.	40 CFR 63.1283(d)(3)(i)(E)	A condenser used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.
i.	40 CFR 63.1283(d)(3)(i)(F) or (G)	A carbon adsorption system used to demonstrate compliance with 40 CFR 63.1274(c)(1) must meet the monitoring and recordkeeping requirements of this paragraph.
j.	40 CFR 63.1283(d)(3)(i)(A), (B) or (D)	A combustion device used to demonstrate compliance with 40 CFR 63.1274(c)(1) must be equipped with a continuous temperature monitoring device and must meet the monitoring and recordkeeping requirements of this paragraph.
k.	40 CFR 63.1282(d)(4) and 40 CFR 63.1282(f)	Where meeting the requirements of these paragraphs, a condenser design analysis may be used to comply with the control requirements of 40 CFR 63.1281(f)(1) or (e)(3)(ii).

l.	40 CFR 63.1283(d)(4)	Using the continuous data collected and recorded as required in the 40 CFR 63.1283(d)(3), the daily average value for each monitored operating parameter must be calculated for each operating day. Valid data points must be available for 75% of the operating hours each day.
m.	40 CFR 63.1283(d)(5)	For each operating parameter monitor installed in accordance w/ 40 CFR 63.1283(d), a minimum or maximum operating parameter must be established to define conditions at which the control device must be operated to continuously achieve the performance requirements of 40 CFR 63.1281(d)(1) or (e)(3). This paragraph also allows operating parameter values to be established based on a condenser's design analysis and the manufacturer's recommendations.
n.	40 CFR 63.1284(b)	The applicable records identified in 40 CFR 63.1284 and 40 CFR 63.10 and reports required by 40 CFR 63.1285 must be maintained for a period of 5 years following the date of record and they must be accessible upon request.
o.	Table 2 to Part 63, Subpart HHH	Table 2 identifies the applicable recordkeeping requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.8 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(5) Except for any part of the closed-vent system that is/are designated as unsafe or difficult to inspect (as identified in 40 CFR 63.1283(c)(5) or (6), the permittee shall conduct the following inspections for any closed vent system used to demonstrate compliance:

a. For joints, seams, or other connections that are not permanently or semi-permanently sealed, the permittee shall conduct an initial and annual inspections according to the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.

b. For joints, seams, or other connections that are permanently or semi-permanently sealed, the permittee shall conduct an initial inspection according to the test methods (Method 21) and procedures specified in 40 CFR 63.1282(b), to demonstrate that the components and connections of the closed vent system operate with no detectable emissions. The permittee shall also conduct annual

visual inspections of the closed vent system, for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.

c. Following any time a component that is permanently or semi-permanently sealed (e.g., a welded joint) is repaired or replaced or such a connection is unsealed, the permittee shall monitor each such joint, seam, or other component/connection according to the test methods and procedures specified in 40 CFR 63.1282(b), to demonstrate that the sealed and/or welded joint(s) or component(s) was/were repaired to meet the requirement for no detectable emissions.

A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(6) The flow indicator for each bypass device shall be set to take a reading at least once every 15 minutes at the inlet to the bypass device. If the bypass device valve is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, the seal or closure mechanism shall be visually inspected at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device. A record of each inspection shall be maintained as specified in 40 CFR 63.1284(b)(7) and (8) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(c)(2)(iii), 40 CFR 63.1282(b), and 40 CFR 63.1284(b)(1), (7), and (8))

(7) In the event that a leak or defect is detected, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown. A record of the date each leak is detected, the maximum instrument reading measured by Method 21, and the date each leak is successfully repaired shall be maintained as specified in 40 CFR 63.1284(b)(7) for a period of five years.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(c)(3) and (4))

(8) The site-specific monitoring plan for the CPMS shall contain the following elements, unless alternative quality assurance and quality control procedures have been approved in accordance with 40 CFR 63.8(f)(4):

a. the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

b. sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

c. equipment performance checks, system accuracy audits, or other audit procedures;

d. ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); and

e. ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

The permittee shall conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(1)(ii))

(9) The permittee shall install and operate a continuous parameter monitoring system designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of 40 CFR 63.1281(f). The continuous parameter monitoring system shall meet the following specifications and requirements:

a. Each continuous parameter monitoring system shall measure data values at least once every hour and record either each measured data value or each block average value for each 1-hour period or shorter periods, calculated from all measured data values during the period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

b. The parameter monitoring system shall be installed, calibrated, operated, and maintained in accordance with the site-specific monitoring plan that addresses the monitoring system design, data collection, and quality assurance and quality control elements outlined in 40 CFR 63.8(d) and 40 CFR 63.1283(d).

c. The continuous monitoring device shall be equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device and specified as follows:

i. A thermal vapor incinerator, demonstrating that the combustion zone temperature is an accurate indicator of performance, shall be equipped with a temperature monitoring device with a continuous recorder and with a minimum accuracy of ±2% of the temperature being monitored in °C or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

ii. A catalytic vapor incinerator shall be equipped with a temperature monitoring device capable of monitoring temperature at two locations and have a minimum accuracy of ±2% of the temperature being monitored in

°C, or ±2.5 °C, whichever value is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

iii. A flare shall be equipped with a heat sensing monitoring device that indicates the continuous ignition of the pilot flame.

iv. A boiler or process heater shall be equipped with a temperature monitoring device with a continuous recorded and with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

v. A condenser shall be equipped with a temperature monitoring device with a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser. A condenser performance curve shall be used to establish the relationship between the condenser outlet temperature and condenser control efficiency.

vi. A regenerative-type carbon adsorption system shall be equipped with:

(a) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ±10%; and

(b) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle. The temperature monitoring device shall have a minimum accuracy of ±2% of the temperature being monitored in °C, or ±2.5 °C, whichever value is greater.

vii. For a nonregenerative-type carbon adsorption system, the design carbon replacement interval shall be monitored and established using a performance test conducted in accordance with 40 CFR 63.1282(d)(3); and the carbon replacement schedule shall be based on the total carbon working capacity of the control device and source operating schedule.

viii. Where using a continuous organic compound monitoring system to measure the concentration level of organic compounds in the exhaust vent stream from the control device, it must be installed, certified, operated, and maintained in accordance with the requirements of Performance Specification 8 or 9 of Appendix B of 40 CFR Part 60 and the manufacturer's specifications.

ix. Where demonstrating compliance using a combustion control device tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall:

(a) determine the actual average inlet waste gas flowrate using the model GRI-GLTCalc™, Version 3.0 or higher, ProMax, or AspenTech HYSYS. Inputs to the models shall be representative of actual operating conditions; and

(b) install a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

d. Except for the inlet gas flowrate, the permittee shall calculate the daily average value recorded for each monitored operating parameter for each operating day. If the glycol dehydration unit operations are continuous, the operating day is a 24-hour period. If the glycol dehydration unit operations are not continuous, the operating day is the total number of hours of operation per 24-hour period. Valid data points must be available for 75% of the operating hours in an operating day to compute the daily average.

e. The minimum operating parameter value or a maximum operating parameter value shall be established based on values measured during the performance test and supplemented, as necessary, by the control device design analysis or the manufacturer's recommendations, to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of 40 CFR 63.1281(d)(1) or 63.1281(e)(3)(ii).

f. Parameters other than the glycol circulation rate shall be based on either the highest measured values or the annual average. For the estimated maximum potential emissions from the glycol dehydration unit(s), the glycol circulation rate used in the calculation(s) shall be the/each unit's maximum rate under its physical and operational design, consistent with the definition of potential to emit in 40 CFR 63.2.

Compliance with the operating parameter limit is achieved when the daily average of the monitoring parameter value is either equal to or greater than the minimum or equal to or less than the maximum monitoring value established under during the performance test. For inlet gas flowrate, compliance with the operating parameter limit is achieved when the value is equal to or less than the value established under 40 CFR 63.1282(g) by the manufacturer or under the performance test conducted under 40 CFR 63.1282(d)(3).

[(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1283(d)(1) through (5) and 40 CFR 63.1270(a)(4))

(10) The following records shall be maintained for the glycol dehydration unit(s), the control device(s), and closed-vent system(s):

a. the general recordkeeping requirements specified in 40 CFR 63.10(b)(2);

b. the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements of 40 CFR 63.1283(d);

c. continuous records of the control device operating parameters monitored to demonstrate compliance;

d. records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.1283(d);

e. for condensers installed to comply with 40 CFR 63.1275, records of the 30-day rolling average condenser efficiency determined under 40 CFR 63.1282(f);

f. for a carbon adsorption system, records identifying the schedule for carbon replacement and records of the actual carbon replacement;

g. hourly records of the flow indicator, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow monitor is not operating;

h. where a car-seal or lock-and-key type bypass closure mechanism is used to comply with the requirements of a closed-vent system, records from the monthly visual inspection of the seals or closure mechanism, and the duration of all periods when the car-seal or lock mechanism has been broken, the bypass line valve position has changed, or the key has been checked out for the lock;

i. records identifying all parts of the closed-vent system that are designated as unsafe or difficult to inspect in accordance with 40 CFR 63.1283(c)(5) or (6), with an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment;

j. records of the initial and annual leak detection inspection of the closed vent system, from the glycol dehydration unit's process and reboiler vents to the control device; and for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, a record of the following information:

   i. the instrument identification numbers, operator name or initials, and identification of the equipment;

   ii. the date the leak or defect was detected and the date of the first attempt to repair the leak or defect;

   iii. the maximum instrument reading measured by the method specified in 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be non-repairable;

   iv. identification of any "repair delayed" and the reason for the delay, if a leak or defect is not repaired within 15 calendar days after its discovery;

v. the name, initials, or other form of identification of the operator (or designee) whose decision it was that repair could not be completed without a shutdown;

vi. the expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days;

vii. the dates of shutdowns that occur while the equipment is unrepaired; and

viii. the date of successful repair of each leak or defect;

k. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected;

l. records of glycol dehydration unit baseline operations calculated as required under 40 CFR 63.1281(e)(1);

m. where demonstrating compliance with the BTEX limit through process modification, the records documenting that the facility continues to operate under the conditions specified in 40 CFR 63.1281(e)(2);

n. the testing method used for demonstrating compliance with BTEX limit;

o. the following records when using a flare to comply with 40 CFR 63.1281(d):

i. the flare design (i.e., steam-assisted, air-assisted, or non-assisted);

ii. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.1282(d)(2); and

iii. all hourly records and other recorded periods when the pilot flame is absent.

The permittee shall maintain files of all the required information identified in 40 CFR 63.1284 (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, and report. The most recent 12 months of all applicable records shall be accessible from a central location by computer or other means that provides access within 2 hours following any request for them.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284)

(11) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments), the continuous monitoring system(s) required in 40 CFR 63.1283(d) must be operated at all times the glycol dehydration unit is in operation. Monitoring data recorded during periods identified below shall not be included in any average or percent

leak rate computed under Part 63 Subpart HHH; however, records shall be kept of the times and durations of all such periods and any periods during process or control device operations when any required monitors are not operating or data were not collected:

a. monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

b. periods of non-operation resulting in cessation of the emissions; and

c. excursions due to invalid data as defined in 40 CFR 63.1283(d)(6)(iii).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1284(b)(3)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

Applicable Rule	Requirement
40 CFR 63.1285(b) and 40 CFR 63.9(b)	For each dehydration unit, an Initial Notification must be submitted to include the information required by these paragraphs. An additional copy must be sent to U.S. EPA's Office of Air Quality Planning & Standards, per 40 CFR 63.1285(b)(1).
40 CFR 63.1285(b)(4) and (d); 40 CFR 63.1282(d)(3); Table 2 to Subpart HHH; and 40 CFR 63.9(h)	For each dehydration unit, a Notification of Compliance Status Report must be submitted within 180 of startup operations, to include the information identified in 40 CFR 63.1285(d).
40 CFR 63.1285(e)(1) and (2); and 40 CFR 63.10(e)(3)	A major source of HAP must submit semiannual reports to include the information identified in 40 CFR 63.1285(e)(2).
OAC 3745-21-10(A)(3) and (4) and 40 CFR 63.9(e), per Table 2 of Subpart HHH	Must submit a Notice of Intent to Test to the district office or local air agency at least 60 calendar days before the performance test is scheduled. Test results must be submitted within 30 days after the performance test is completed.
40 CFR 63.1285(f)	Notification of a process change, from information submitted in the Notification of Compliance Status

	Report, must be submitted within 180 days following the change.
Table 2 to Part 63, Subpart HHH	Table 2 identifies the applicable reporting requirements from the General Provisions of Part 63 (Subpart A, 40 CFR 63.9 and 40 CFR 63.10).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart HHH)

(3) The permittee of the existing small glycol dehydration unit, located at the natural gas transmission and/or storage facility, shall submit an initial notification by 10/15/13 (1 year after becoming subject to the provisions of Part 63 Subpart HHH) that the facility is subject to the provisions of the NESHAP. The initial notification shall contain the following information:

a. the name and address of the affected source;

b. a statement that the facility is subject to the requirements of Part 63, Subpart HHH;

c. identification of the subject source as each existing small glycol dehydration unit;

d. the type of liquid glycol that will be used in each unit and its maximum design circulation rate;

e. identification of the emission points from the glycol dehydration unit(s) and the possible hazardous air pollutants, i.e., benzene, toluene, ethyl benzene, xylene; and

f. a statement that the unit is an existing small glycol dehydration unit located at a major source of HAP.

In addition to submitting an initial notification to the appropriate district or local office of the Ohio EPA Division of Air Pollution Control, a copy of the initial notification must be submitted to U.S. EPA Region 5 at the following address: U.S. EPA Region 5, Ralph Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, IL 60604.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1285(b)(1), 40 CFR 63.9(a) and (b))

(4) Personnel from the Ohio EPA, Central District Office shall be notified 60 days prior to initiation of the applicable performance tests or a performance evaluation of a CMS required to demonstrate compliance. Ohio EPA staff shall be permitted to examine equipment and witness the certification tests. The test results shall be submitted to Ohio EPA, Central District Office within 30 days after the test is completed. If conducting a performance evaluation of a continuous emissions monitoring system used to demonstrate compliance, two copies of the notification of the performance evaluation and the test results shall be submitted to Ohio EPA, one copy to Ohio EPA, Central District Office and one copy to Ohio EPA, Central Office.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), 40 CFR 63.1285(b)(2) and (3), 40 CFR 63.8(e)(2), and 40 CFR 63.7(b))

(5) Following the initial performance test and each required sequential determination and/or demonstration of compliance, the permittee shall submit to the Director (Ohio EPA, Central District Office) the Notification of Compliance Status Report, signed by the owner or operator or other responsible official who is certifying the accuracy and completeness of the report. The compliance notification shall be postmarked no later than 30 days following the completion of the compliance demonstration. The first Notification of Compliance Status Report must be submitted within 180 days after the compliance date identified in 40 CFR 63.1270. The compliance report shall include the following information:

a. the NESHAP (applicable subpart) and emissions and/or other limitation(s) applicable to the glycol dehydration unit(s);

b. the method that was used to determine compliance with the applicable limitation and/or requirement and the date each compliance demonstration was conducted;

c. the results of any required performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted to demonstrate compliance;

d. the methods that will be used for determining continuing compliance, including a description of the monitoring, the records maintained of the process and/or equipment parameters, and test methods;

e. the mass emission rate of TOC (minus methane and ethane) or total HAP emitted by the glycol dehydration unit(s), as measured in accordance with the test methods specified in 40 CFR 63.1282;

f. the analysis demonstrating whether the glycol dehydration unit(s) is/are a major source for HAP and the supporting potential and controlled emissions data to document the determination;

g. a description of the air pollution control equipment (or control method) for each emission point and the control efficiency (%) for each control device/method;

h. a statement, signed by a responsible official, as to whether the glycol dehydration unit(s) has/have met the relevant standards, limitations, and/or other requirements of the NESHAP; and if not, the proposed method and time-line for achieving compliance.

i. if a closed-vent system and a control device other than a flare are used to demonstrate compliance, the permittee shall submit the following information:

i. the results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii); and

ii. if using a condenser, documentation of the condenser design analysis as specified in 40 CFR 63.1282(d)(4), if electing to demonstrate compliance, as permitted, using the design analysis and gas analyses; or

iii. the performance test results, including the percent reduction of total HAP or TOC (minus methane and ethane) or the outlet concentration of HAP or TOC; and the value of the monitored parameters, averaged over the full period of the performance test;

j. if a closed-vent system and a flare are used to demonstrate compliance, the permittee shall submit performance test results to include the following information:

i. all visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations; and

ii. a statement of whether a flame was present at the pilot light over the full period of the compliance determination;

k. the results of the initial inspection of the closed-vent system, performed in accordance with 40 CFR 63.1283(c)(2)(i) and (ii);

l. one complete test report for each test method used to document compliance, to include: a description of the sampling site, the sampling and analysis procedures, any modifications to standard procedures, the quality assurance procedures, the record of operating conditions during the test, any record of preparation of standards, record of calibrations, the raw data sheets for field sampling and laboratory analyses, documentation of calculations, and any other information required by the test method;

m. for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d):

i. the minimum or maximum operating parameter value for the control device, established to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of §63.1281(d)(1) or (e)(3)(ii);

ii. an explanation of the rationale for why the operating parameter values were selected and any data and calculations used to develop the minimum or maximum value; and

iii. a definition of the source's operating day for purposes of determining daily average values of monitored parameters (hours of operation per day);

n. the results of any continuous monitoring system performance evaluations;

o. the method used to determine the maximum natural gas or hydrocarbon liquid throughput;

p. the predetermined carbon replacement schedule if demonstrating compliance using a carbon adsorption system;

q. the method(s) used to demonstrate compliance with the chosen compliance option, i.e., for 0.90 MG/year benzene, 95% control of TOC or total HAP, 20

ppmv TOC or total HAP, or meeting the requirements of 40 CFR 63.11(b) for a flare; and

r. a statement as to whether the source has complied with the requirements of 40 CFR Part 63, Subpart HHH.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04 [30-day submission], 40 CFR 63.1285(d), and 40 CFR 63.9(h))

(6) Semiannual Reports shall be submitted for a major source, beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due. The following information shall be included in the semiannual report:

a. the information required under 40 CFR 63.10(e)(3) for continuous monitoring systems;

b. a description of all excursions that occurred during the 6-month reporting period, as identified 40 CFR 63.1283(d)(6);

c. for each excursion from the established daily average value of the operating parameter used to demonstrate continuous compliance, the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the excursion;

d. for each excursion caused when the 30-day average condenser control efficiency is less than 95%, as specified in 40 CFR 63.1283(d)(6)(ii), the report must include the 30-day average values of the condenser control efficiency, determined in accordance with 40 CFR 63.1282(f), and the date and duration of the excursion;

e. for each excursion caused by the lack of monitoring data, i.e., less than 75% of the operating hours in any day (per 40 CFR 63.1283(d)(6)(iii)), the report must include the date and duration of time when the monitoring data were not collected and the reason;

f. for each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, the records specified in 40 CFR 63.1284(b)(7) identifying each leak and information related to the date of its detection and repair;

g. for each closed-vent system with a bypass line, records of all periods when the vent stream is diverted from the control device through a bypass line and/or all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out;

h. the information necessary to document the glycol dehydration unit was in compliance during the reporting period;

i. identification of any changes made to the glycol dehydration unit(s), the closed-vent system, or control device that would alter the method of compliance;

j. if there were no excursions during the reporting period, a statement to that effect;

k. if applicable, a statement that there no continuous monitoring system, used to demonstrate compliance, was inoperative, out of control, repaired, or adjusted during the reporting period;

l. if the compliance demonstration was approved to include a process modification to attain the 95% reduction of emissions, the information supporting compliance; and

m. for flares, any periods of time when the pilot flame was absent and any record of visible emissions.

n. for a combustion control device performance tested in accordance with 40 CFR 63.1282(g) by the manufacturer:

i. each excursion from the maximum inlet gas flowrate, the flowrate measured, and the date and duration of the exceedance;

ii. each excursion from the visible emissions standard identified in 40 CFR 63.1282(h)(3), the total time visible emissions exceeded 2 minutes in any hour of observation, the date and duration of the period of the exceedance, the repairs made to the unit, and the date the unit was returned to service and visible emissions were eliminated; and

iii. any period of time when the pilot flame was absent; and

iv. the date of the semi-annual maintenance inspection required to be conducted for the combustion control device under 40 CFR 63.1283(b) and the modifications, maintenance (e.g. cleaning of the fuel nozzles), or repairs made;

o. the results of any periodic test conducted during the reporting period; and

p. certification by a responsible official of the truth, accuracy, and completeness of the report.

((Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(e))

(7) Where a combustion control device model is tested by the manufacturer under 40 CFR 63.1282(g), the permittee shall submit the following information in the Notification of Compliance Status Report for the test report required under 40 CFR 63.1285(d)(1)(iii):

a. a full schematic of the control device and dimensions of the device components;

b. the design net heating value (minimum and maximum) of the device;

c. the test fuel gas flow range (in both mass and volume), including the minimum and maximum allowable inlet gas flowrate;

d. the air/stream injection/assist ranges, if used;

e. the test parameter ranges applicable for the tested model, i.e.:

i. the fuel gas delivery pressure and temperature;

ii. the fuel gas moisture range;

iii. the purge gas usage range;

iv. the condensate (liquid fuel) separation range;

v. the combustion zone temperature range. This is required for all devices that measure this parameter;

vi. the excess combustion air range;

vii. the flame arrestor(s);

viii. the burner manifold pressure;

ix. the pilot flame sensor;

x. the pilot flame design fuel and fuel usage;

xi. the tip velocity range;

xii. the Momentum flux ratio;

xiii. the exit temperature range;

xiv. the exit flowrate; and

xv. the wind velocity and direction.

The test report shall include all calibration quality assurance/quality control data, calibration gas values, gas cylinder certification, strip charts, the test times, and calibration values.

(Authority for term: OAC rule 3745-77-07(C)(1)) and 40 CFR 63.1282(g)(8))

(8) If the permittee is using a combustion control device model tested under 40 CFR 63.1282(g) by the manufacturer, and the test results for that model have not been posted by the manufacturer at the website identified at: epa.gov/airquality/oilandgas/, then an electronic copy of the performance test results shall be submitted by the permittee via e-mail to Oil_and_Gas_PT@EPA.GOV.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(d)(1)(ii))

(9) Within 60 days following the date of completing each performance test (required to demonstrate compliance with Part 63 Subpart HHH), the permittee must submit the test results to U.S. EPA's WebFIRE database using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), www.epa.gov/cdx . Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT), found at http://www.epa.gov/ttn/chief/ert/index.html. Only data collected using test methods identified on the ERT Website are subject to this requirement

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1285(g))

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:

0.064 lb/hr and 0.004 TPY of SO_2

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.057 lb SO_2/mmBtu (20 gr S/100scf) multiplied the 0.623 mmBtu/hr NAO flare plus the product of an emission factor of 0.057 lb/mmBtu (20 g S/100 scf) multiplied by 0.5 mmBtu/hr NAO reboiler burner.

The annual limitation was established based on an average annual sulfur concentration of 0.25 grains S per 100 cubic feet of natural gas. Therefore, compliance with the annual emission limitation shall be determined based on the emission factor of 0.000714 lb SO_2/mmBtu for the flare and reboiler. The annual limitation was established by multiplying this annual average hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6C.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

0.09 lb/hr and 0.40 TPY of VOC

Applicable Compliance Method:

The hourly emission rate is derived using the Gas Research Institute simulation program, GLYCalc version 3, based on wet gas analyses of the gases assuming

a dehydrator gas feed rate of 13 mmscf/day multiplied by 0.02 representing 98% flare destruction efficiency (0.08 lb VOC/hr controlled emissions) plus the product of an emission factor of 0.014 lb VOC/mmBtu (AP-42 Tbl 13.5-1, 1/95; 10% of THC assumed to be VOC) multiplied by 0.623 mmBtu/hr NAO flare burner rate plus the product of an emission factor of 0.005 lb VOC/mmBtu (AP-42 Tbl 1.4-2, 7-98) multiplied by 0.5 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hr/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be assumed provided compliance is maintained with the hourly limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

0.09 lb/hr and 0.40 TPY of NOx

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rate using an emission factor of 0.068 lb NOx/mmBtu (AP-42, Tbl 13.5-1, 1/95) multiplied by the 0.623 mmBtu/hr NAO flare plus the product of an emission factor of 0.098 lb NOx/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 0.5 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hr/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be assumed provided compliance is maintained with the hourly limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

d. Emission Limitation:

0.27 lb/hr and 1.19 TPY of CO

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.37 lb CO/mmBtu (AP-42, Tbl 13.5-1, 1/95) multiplied by 0.623 mmBtu/hr NAO flare plus the product of

an emission factor of 0.0824 lb CO/mmBtu (AP-42, Tbl 1.4-1, 7/98) multiplied by 0.5 mmBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hr/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be assumed provided compliance is maintained with the hourly limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

e. Emission Limitation:

0.002 lb/hr and 0.014 TPY of PM

Applicable Compliance Method:

The hourly emission rate is derived using the maximum hourly waste gas and natural gas combustion rates using an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by the 0.623 mmBtu/hr NAO flare plus the product of an emission factor of 0.00186 lb PE/mmBtu (AP-42, Tbl 1.4-2, 7/98; filterable component only) multiplied by 0.5 MMBtu/hr NAO reboiler burner.

The annual limitation was established by multiplying the hourly emission limitation by the maximum annual operating hours (8760 hr/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be assumed provided compliance is maintained with the hourly limitation.

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

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

f. Emission Limitation:

Visible particulate emissions from the boiler stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

g. Emission Limitation:

Particulate emissions (PE) from the boiler stack shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.0019 lb PM10/mmBtu multiplied by 0.5 mmBtu/hr NAO reboiler burner. The emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 1: External Combustion Sources, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-10(B)(1), OAC rule 3745-17-03(B)(9), and OAC rule 3745-77-07(C)(1))

h. Emissions Limitations:

BTEX emissions from the existing small glycol dehydration unit(s) shall be reduced to a level less than or equal to the limit calculated from Equation 1 of 40 CFR 63.1275(b)(1)(iii); or, if it can be demonstrated, may meet this limit without controls:

For new units:

$EL_{BTEX} = 3.10 \times 10^{-4} \times \text{throughput} \times C_{i,BTEX} \times 365 \text{ days/yr} \times 1\text{Mg}/1{,}000{,}000 \text{ g}$

Where:

EL_{BTEX} = unit-specific BTEX emission limit, Mg/yr

3.10×10^{-4} = BTEX emission limit for new units, g BTEX/scm – ppmv

Throughput = annual average daily natural gas throughput, scm/day

$C_{i,BTEX}$ = average annual BTEX concentration of natural gas at the inlet to the glycol dehydration unit, ppmv.

Applicable Compliance Method:

The permittee, demonstrating compliance through performance testing to meet the applicable emission standard, shall do so using the following methods and procedures in accordance with 40 CFR 63.1282(c)(2) if uncontrolled or 40 CFR 63.1282(d) if controlled:

i. Method 1 or 1A, as appropriate, at 40 CFR Part 60, Appendix A shall be used for selection of the sampling sites. Any references to particulate mentioned in Methods 1 and 1A do not apply. To determine compliance with the BTEX limitation, sampling sites shall be located at the outlet of the final control device or, if compliance can be demonstrated with no controls, at the process vent of the glycol dehydration dehydrator.

ii. Method 2, 2A, 2C, or 2D, as appropriate, at 40 CFR Part 60, Appendix A shall be used to determine the gas volumetric flowrate.

iii. The integrated sampling and analysis procedures of Method 3A or 3B at 40 CFR Part 60, Appendix A, or other method otherwise approved by the Administrator, shall be used to determine the oxygen concentration, where a correction factor is required for excess air.

iv. Method 18 at 40 CFR Part 60, Appendix A, ASTM D6420–99 (2004) (Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry), or other method otherwise approved by the Administrator, shall be used to determine BTEX emissions, in kilograms/hour, as determined in 40 CFR 63.1282(d)(3)(v) using the following procedures and calculated as follows:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of 4 grab samples shall be taken. If grab sampling is used, the samples shall be taken at approximately equal intervals in time, i.e., every 15-minute intervals during the run.

(b) The mass rate of BTEX (Eo) shall be computed using the following equation:

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj}\right) Q_o$$

Where:

Eo= Mass rate of BTEX at the outlet of the control device, dry basis, kilogram per hour.

Coj= Concentration of sample component j of the gas stream at the outlet of the control device, on a dry basis, parts per million by volume.

Moj= Molecular weight of sample component j of the gas stream at the outlet of the control device, gram/gram-mole.

Qo= Flowrate of gas stream at the outlet of the control device, dry standard cubic meter per minute.

K_2= Constant, 2.494×10^{-6} (parts per million) (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

n = Number of components in sample.

v. Only BTEX compounds measured by Method 18 from 40 CFR Part 60, Appendix A, or ASTM D6420–99 (2004) shall be summed using the equation above, as specified in 40 CFR 63.1282(c)(2)(iii) for uncontrolled units or in 40 CFR 63.1282(d)(3)(v) for controlled units;

vi. The mass rate of BTEX at the outlet of the glycol dehydration unit process vent may be calculated using the GRI-GLYCalc™ model, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit(s) and shall be determined using the procedures documented in the Gas Research Institute (GRI) report entitled ‘‘Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions’’ (GRI–95/0368.1), and all BTEX measured by Method 18 or ASTM D6420–99 shall be summed;

vii. Method 25A, 40 CFR Part 60, Appendix A shall be used for estimated VOC emissions.

viii. Operating parameters shall be established in accordance with 40 CFR 63.1283(d), as applicable to the chosen control device, during the performance test to demonstrate continuous compliance.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1281(f)(1), 40 CFR 63.1282(a), (c), through (d)(3)(v), and 40 CFR 63.1283(d))

i. An initial performance test shall be conducted within 180 days after the compliance date, or by 4/13/15 for existing small glycol dehydration units, except that the initial performance test for existing units demonstrating compliance using a combustion control device (i.e., a combustion control device installed on or before August 23, 2011) at major sources shall be conducted no later than 10/15/15.

The first periodic performance test shall be conducted no later than 60 months after the initial performance test is required to be conducted. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. The periodic performance test results must be submitted in the next Semiannual Report as specified in 40 CFR

63.1285(e)(2)(x). Combustion control devices meeting the following criteria are not required to conduct periodic performance tests:

i. a combustion control device whose model is tested by the manufacturer and is meeting the criteria of 40 CFR 63.1282(g), or

ii. a combustion control device demonstrating, during the initial performance test conducted under 40 CFR 63.1282(d), the combustion zone temperature is an indicator of the destruction efficiency and is operated at a minimum temperature of 760 degrees C.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1282(d)(3)(vi))

j. Emissions Limitation:

Closed Vent Systems.

Where meeting the emissions standard using a control device, the gas stream from the glycol dehydration unit(s) process vents shall be routed through a closed-vent system to a control device meeting the requirements of 40 CFR 63.1281(c) and (d). The closed-vent system shall be designed and operated with no detectable emissions. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background.

Applicable Compliance Method:

Initial and annual visual inspections of the closed vent system shall meet the requirements of 40 CFR 63.1283(c) and shall be conducted in accordance with the test procedure set forth in Method 21 of 40 CFR Part 60, Appendix A and as identified in 40 CFR 63.1282(b). The detection of leaks of VOC into the ambient air from equipment and background level shall be determined as follows:

i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21 and the instrument shall be calibrated each day before use.

ii. The following calibration gases shall be used:

(a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and

(b) a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.

All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40

CFR 60 Appendix A. The closed-vent system shall be considered to have no detectable emissions if the instrument reading is less than 500 parts per million by volume (ppmv) above background (per 40 CFR 63.1282(b)(8)).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1281(c), 40 CFR 63.1282(b), and 40 CFR 63.1283(c))

k. Emissions Limitation:

Control Device Requirements.

Unless it can be demonstrated that the uncontrolled BTEX emissions from the process vents of the glycol dehydration unit(s) can met the appropriate standard calculated in 40 CFR 63.1275(b)(1)(iii), in accordance with the requirements of 40 CFR 63.1282(c)(2), the mass content of BTEX from the glycol dehydration unit, in the gases vented to the control device, shall be reduced to meet the limit calculated in 40 CFR 63.1275(b)(1)(iii),as determined in accordance with the requirements of 40 CFR 63.1282(d)(3)(v).

Applicable Compliance Method:

Emissions from the glycol dehydration unit shall be vented through a closed vent system meeting the requirements of 40 CFR 63.1281(c) and to a control device meeting the requirements of 40 CFR 63.1275 and 40 CFR 63.1281(f); and the control device shall meet the following requirements:

i. An open flare used to demonstrate compliance shall be designed and operated in accordance with 40 CFR 63.1282(d)(2) and 40 CFR 63.11(b); and it must be equipped with a heat sensing monitoring device and recorder that indicates the continuous ignition of the pilot flame per 40 CFR 63.1283(d)(3)(i)(C);

ii. A demonstration of compliance using a combustion device or enclosed flare shall be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3), and it must be equipped with a continuous temperature monitoring device which shall be used to establish a minimum operating temperature in accordance with 40 CFR 63.1282(e) and 40 CFR 63.1283(d);

iii. A demonstration of compliance using a condenser may be conducted through a performance test, in accordance with 40 CFR 63.1282(d)(3); or a design analysis may be used in accordance with 40 CFR 63.1282(d)(4); or a condenser performance curve may be generated using the GRI-GLYCalc™ model in accordance with 40 CFR 63.1282(d)(5) and (f). The condenser must be equipped with a continuous parameter monitoring device and must establish a minimum or maximum operating parameter in accordance with 40 CFR 63.1283(d); and

iv. A demonstration of compliance using a carbon adsorption system shall be conducted through a performance test, in accordance with 40 CFR

63.1282(d)(3), and it must be equipped with a continuous parameter monitoring device which shall be used to establish minimum or maximum operating parameters in accordance with 40 CFR 63.1283(d)(3)(i)(F) for the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle, the average carbon bed temperature for the duration of the carbon bed steaming cycle, and the actual carbon bed temperature after regeneration within 15 minutes of completing the cooling cycle; or alternatively the carbon replacement for non-regenerative carbon may be monitored in accordance with 40 CFR 63.1283(d)(3)(i)(G).

v. Potential BTEX emissions estimates shall be based on the maximum glycol circulation rate(s), in gallons per minute (gpm); the worst case pollutant concentrations from representative extended gas analyses of the inlet wet gas; and the maximum natural gas flow rate, as determined by 40 CFR 63.1282(a)(1)(i); or for a new unit, potential emissions shall be estimated in accordance with 40 CFR 63.1270(a) and increased by a factor of 1.2.

vi. Where a control device is required to meet the BTEX limit, the gas stream from the glycol dehydration unit process vent shall be routed through a closed-vent system to control device that meets the requirements of 40 CFR 63.1281(f).

vii. The actual flowrate of natural gas to the glycol dehydration unit(s) shall be made by installing a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2% or better. The annual natural gas flowrate shall be converted to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processes natural gas.

viii. A performance test conducted by the manufacturer of a combustion control device may be used to demonstrate compliance if:

(a) the manufacturer has demonstrated compliance for the specific model in accordance with all of the requirements contained in 40 CFR 63.1282(g);

(b) the actual average inlet waste gas flowrate does not exceed the maximum established by the manufacturer and is determined using the model GRI-GLYCalc version 3.0 or higher, ProMax, or AspenTech HYSYS, where inputs to the models are representative of actual operating conditions of the controlled unit(s);

(c) a heat sensing device, equipped with a continuous recorder, is installed that indicates continuous ignition of the pilot flame;

(d) the combustion control device is operated with no visible emissions, except for periods not to exceed a total of 2 minutes

during any hour of operation; and 1-hour visible emissions readings, using Method 22 at 40 CFR Part 60, Appendix A-7, are conducted quarterly; and

(e) the permittee develops an inspection and maintenance plan for the combustor which shall include the manufacturer's recommendations for ensuring proper operations; and semiannual inspections are conducted with maintenance and replacement of components in accordance with the plan.

In accordance with 40 CFR 63.1282(d)(3)(iii)(B)*(4)* for controlled and 63.1282(c)(2)(iii) for uncontrolled small glycol dehydration units, the GRI-GLYCalc™ model, Version 3.0 or higher, can be used to calculating the mass rate of BTEX.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii), 40 CFR 63.1275(c)(3)(iii), 40 CFR 63.1281(f), 40 CFR 63.1282, and 40 CFR 63.1283(b) through (d))

l. Where using a condenser as a control device the permittee shall establish a condenser performance curve using one of the following methods and in accordance with 40 CFR 1283(d)(5)(ii):

i. If using a condenser design analysis, in accordance with the requirements of 40 CFR 63.1282(d)(4), a condenser performance curve and the minimum or maximum operating parameter value(s) shall be established based on the design analysis which may be supplemented by the manufacturer's recommendations.

ii. If conducting a performance test, in accordance with the requirements of 40 CFR 63.1282(d)(3), the condenser performance curve shall be based on values measured during the performance test and supplemented as necessary by the condenser design analysis or the manufacturer's recommendations or both.

iii. As an alternative to using the condenser design analysis, the permittee may use the procedures documented in the GRI report entitled ''Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions'' (GRI–95/0368.1) as inputs for the model GRI-GLYCalc™, Version 3 or higher, to generate a condenser performance curve.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

m. Where demonstrating compliance using a condenser's design analysis, the permittee shall establish the relationship between the condenser performance curve and the condenser outlet temperature; and the control efficiency shall be determined as follows:

i. The design analysis shall include the vent stream composition, constituent concentrations, flowrate, relative humidity, and temperature,

and shall establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

ii. Following 30 days of operations, the permittee shall calculate the 30-day average BTEX emission reduction necessary to meet the BTEX limit using the following procedures:

(a) monitor and calculate the daily average condenser outlet temperature in accordance with 40 CFR 63.1283(d)(4);

(b) determine the condenser efficiency for each operating day using the daily average condenser outlet temperature and the condenser performance curve; and

(c) at the end of each operating day, calculate the 30-day BTEX emission reduction from the condenser efficiencies for the preceding 30 operating days.

iii. Compliance is achieved if the average BTEX emission reduction calculated for each 30-day average is equal to or greater than the minimum percent reduction necessary to meet the BTEX limit.

If the permittee uses a combination of process modification(s) and a condenser in accordance with the requirements of 40 CFR 63.1281(e), the 30-day BTEX emission reduction shall be calculated using the emission reduction achieved through process modifications and the condenser efficiency as determined above, both for the previous 30 operating days. Or if it is determined that the design analysis is not sufficient to demonstrate compliance, the permittee shall be required to conduce a performance test to demonstrate compliance with the BTEX limit and to identify the minimum percent reduction necessary to meet the BTEX limit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1282(f), 40 CFR 63.1281(f)(1)(ii), 40 CFR 63.1282(d)(4) though (5), and 40 CFR 63.1283(d)(5)(i)(B) though (ii))

n. The maximum annual facility natural gas throughput shall be calculated as follows:

Throughput = $8760 / (1/IR_{max} + 1/WR_{max})$

Where:

Throughput = the maximum annual facility wide natural gas throughput in cubic meters per year

IR_{max} = maximum facility injection rate in cubic meters per hour

WR_{max} = maximum facility withdrawal rate in cubic meters per hour

8760 = maximum hours of operation per year.

A facility that only transports natural gas, a facility that increases its throughput above the throughput calculated above, and/or a new facility estimating the operational natural gas throughput before startup shall calculate the maximum natural gas throughput as the highest annual natural gas throughput times a factor of 1.2.

(Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR 63.1270(a)(1), (2), through (3))

o. Emissions Limitation:

Compliance using an open flare.

There shall be no visible emissions from a flare used to demonstrate compliance with Part 63, Subpart HHH, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours of operation and the flare shall be designed and operated in accordance with 40 CFR 63.11(b).

Applicable Compliance Method:

Compliance with the visible emissions limitation shall be determined in accordance with U.S. EPA Method 22 in Appendix A of 40 CFR Part 60. The heat content, flowrate, and exit velocity shall be determined in accordance with 40 CFR 63.11(b).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 63.1281(d)(1)(iii), and 40 CFR 63.1282(d)(2))

g) Miscellaneous Requirements

(1) The permittee shall meet the applicable requirements of the most current version of 40 CFR Part 63 Subpart HHH following any amendments to these rules, which may supersede any requirements identified in this permit.

10. B034, Recip Engine/Generator #099G2

Operations, Property and/or Equipment Description:

4SRB Waukesha H2475 Recip Engine (Emergency Generator, No. 099G2), 347 Brake HP, 315 HP.

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)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE), from the emissions unit, shall not exceed 0.310 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-06(G)	See b)(2)a. below.
d.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)b. below.
e.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)c., c)(2) though c)(5), d)(2), d)(3), e)(3), and e)(4) below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), this emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. Table 8 to Subpart ZZZZ of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart ZZZZ of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

c. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6595(a)(1)	The compliance date for Part 63 Subpart ZZZZ for existing SI RICE is 10/19/13.
Applicable Tables from Part 63, Subpart ZZZZ	Compliance requirements in Table 2c #6; continuous compliance in Table 6 #9; general provision from Subpart A in Table 8.
40 CFR 63.6602	Maintain compliance with operational limitations in Table 2c #6 (inspection and maintenance requirements) to Part 63 Subpart ZZZZ.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the SI RICE, as identified in Table 8 to Subpart ZZZZ.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) There is no time limit on the use of the emergency stationary RICE during emergency situations; however, the emergency engine shall not be used in any operations other than an emergency with the following exceptions:

a. The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the facility's insurance company. Maintenance checks and readiness testing is limited to 100 hours per year, unless additional time is approved by Ohio EPA or additional hours are required by Federal, State, or local standards.

b. The emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot include peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except

c. The emergency engine may be operated for a maximum of 15 hours per year as part of a demand-response program if the regional transmission organization, or equivalent balancing authority, and transmission operator has determined there

are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or an unacceptable voltage level.

d. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur; and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand-response operation shall be counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is limited to emergency power.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ - Section 63.6640(f)(1))

(3) Unless meeting the requirements of 40 CFR 63.6625(j), the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first; shall inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first; and shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace them as necessary. A log shall be maintained for the hours of operation between each oil, filter, and spark plug change and the date of each required inspection.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6602, 63.6625(j), Table 2c (No. 6), and Table 6 (No.9))

(4) The permittee shall install a non-resettable hour meter in order to record the hours of operation during emergency and non-emergency conditions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6625(f) and 63.6655(f))

(5) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(e)	Operate & maintain RICE according to mfg. instructions and develop a facility maintenance plan for the RICE that meets the requirements of Subpart ZZZZ Table 2c #6.
40 CFR 63.6625(f)	Install a non-resettable hour meter by compliance date.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.
40 CFR 63.6625(j)	Oil analysis program, option to extend the oil change frequency.
40 CFR 63.6640(f)	The emergency RICE is limited to 100 hours/year for maintenance checks and readiness testing and may be operated up to 50 hours/year in non-emergency situations which are counted towards the 100 hours provided for

	maintenance and testing. The 50 hours per year cannot be used for peak shaving or to generate income to supply power to an electric grid, but can include a maximum of 15 hours/year as part of a demand response program if the regional transmission organization determines there are emergency conditions.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) The permittee shall maintain records or a log for the operation of the engine in emergency and non-emergency service, as recorded through the non-resettable hour meter. The records shall include the number or hours spent in emergency operation, including what classified the operation as an emergency; the number or hours spent in maintenance checks and readiness testing; and the number or hours spent in non-emergency operations. If the RICE is operated as part of a demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of the demand response.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ – Sections 63.6655(f) and 63.6640(f))

(3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6655(f)	Maintain records of the hours of operation in emergency operations, non-emergency operations, and in maintenance checks and readiness testing, as recorded through the non-resettable hour meter. If the RICE is used for demand response, records of the notification of the emergency and the time of operation, as part of the demand response, is to be maintained.
40 CFR 63.6640(a) and 40 CFR 63.6655(d)	Keep the records required in #9 of Table 6 to Subpart ZZZZ to demonstrate continuous compliance.
40 CFR 63.6655(e)	Records of maintenance and inspections conducted in order to demonstrate compliance with Table 2c and to demonstrate that the RICE was operated and maintained according to the facility's maintenance plan.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.

40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

(3) The permittee shall include, in the annual compliance certification, the number of hours of operation in emergency and non-emergency service, including the time of operations for maintenance checks and readiness testing, as recorded by the non-resettable hour meter.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ - Section 63.6640(f))

(4) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6640(b); and OAC rule 3745-15-03(B)(2) and (D)	Submit, in the annual compliance certification, each instance in which the operational requirements in Table 2c of the NESHAP Subpart ZZZZ were not met.
40 CFR 63.6640(e) and OAC rule 3745-15-03(B)(2) and (D)	Submit, in the annual compliance certification, each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

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 particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), and OAC rule 3745-77-07(C)(1))

b. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) Any amendment to 40 CFR Part 63, Subpart ZZZZ shall supersede the Subpart ZZZZ compliance limitations and/or compliance options contained in this permit.

11. Emissions Unit Group -2SLB Prime Mover Engines: B011,B012,B015,B016,B017,B021,B022,B023,

EU ID	Operations, Property and/or Equipment Description
B011	2SLB Cooper-Bessemer GMWA-6, Recip Engine COMPR #09904, 1650 Brake HP, Product Rating 1,500HP.
B012	2SLB Cooper-Bessemer, GWMA-6, Recip Engine COMPR #09905, 1,650 Brake HP, Product Rating 1500HP.
B015	2SLB Cooper-Bessemer GMWA-6, Recip Engine COMPR #09906, 1,650 Brake HP, Product Rating 1500 HP.
B016	2SLB Cooper-Bessemer GMWA-6, Recip Engine COMPR #09907, 1,650 Brake HP, Product Rating 1500 HP.
B017	2SLB Cooper-Bessemer GMWA-6, Recip Engine COMPR #09908, 1,650 Brake HP, Product Rating 1500 HP.
B021	2SLB Worthington ML-10 Recip Engine COMPR #09911, 3,080 Brake HP, Product Rating 2,800 HP.
B022	2SLB Worthington ML-10 Recip Engine COMPR #09909, 3,080 Brake HP, Product Rating 2,800 HP.
B023	2SLB Worthington ML-10 Recip Engine COMPR #09910, 3,080 Brake HP, Product Rating 2,800 HP.

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)(1)	Visible particulate emissions (PE) from the stacks serving these emissions units shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE), for each emissions unit, shall not exceed 0.062 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-06(G)	See b)(2)a.
d.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Reciprocating Internal Combustion Engines)	

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), these emissions units are exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in each emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. These emissions units (B011, B012, B015, B016, B017, B021, B022, and B023) 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. Therefore, the units do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 63, Subpart A, including the initial notification requirements specified in 40 CFR 63.6645(d). The facility is identified as a major source for HAPs.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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 these emissions units.

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

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in these emissions units. 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 particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

b. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-1 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

12. Emissions Unit Group -4SRB Prime Mover Engines: B019 and B020.

EU ID	Operations, Property and/or Equipment Description
B019	4SRB Waukesha H2475G Recip Engine COMPR #09902, 306 Brake HP, Product Rating 278 HP.
B020	4SRB Waukesha H2475G Recip Engine COMPR #09903, 306 Brake HP, Product Rating 278 HP.

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)(1)	Visible particulate emissions (PE) from the stacks serving these emissions units shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE), for each emissions unit, shall not exceed 0.310 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-06(G)	See b)(2)a.
d.	40 CFR Part 63, Subpart A (National Emission Standards for Hazardous Air Pollutants: General Provisions)	See b)(2)b.
e.	40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines)	See b)(2)c., b)(2)d., c)(2), d)(2), e)(4), f)(1)c., and g)(1)., below.

(2) Additional Terms and Conditions

a. Per OAC rule 3745-18-06(A), these emissions unit are exempt from the requirements of OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned in the emissions unit.

(Authority for term: OAC rule 3745-18-06(G) and OAC rule 3745-77-07(A)(1))

b. Table 8 to Subpart ZZZZ of 40 CFR Part 63 - "Applicability of General Provisions (Subpart A) to Subpart ZZZZ of Part 63" identifies which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart A)

c. Following the compliance date of the NESHAP, the permittee shall limit the concentration of formaldehyde from the stationary RICE exhaust to 10.3 ppmvd or less at 15% O_2 at the outlet of the control device or from the exhaust stack of the engine.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 63.6602, 40 CFR 63.6640(a), and 40 CFR Part 60, Subpart ZZZZ, Table 2c #11)

d. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6595(a)(1)	The compliance date for Part 63 Subpart ZZZZ for existing SI RICE was 10/19/13.
Applicable Tables from Part 63, Subpart ZZZZ	Emission limit in Table 2c #11; performance test methods in Table 4 #3; initial compliance demonstration in Table 5 #12; reporting requirements/frequency in Table 7; general provisions from Subpart A in Table 8.
40 CFR 63.6602	Maintain compliance with the emission limitation in Table 2c #11 (limit formaldehyde to 10.3 ppmvd at 15% O_2) to Part 63 Subpart ZZZZ.
40 CFR 63.6602; 40 CFR 63.6612; and 40 CFR 63.6620	Conduct an initial performance test within 180 days following the compliance date or by 4/17/14, to demonstrate compliance with the formaldehyde emission standard and in accordance with the requirements specified in Tables 4 and 5 to the subpart.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the SI RICE, as identified in Table 8 to Subpart ZZZZ.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

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))

(2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6635	Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. Must use all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) in calculations used to report emissions or operating levels.
40 CFR 63.6655(a)	Keep records of: 1. each notification and report submitted to comply with Subpart ZZZZ; 2. the occurrence and duration of each malfunction of the RICE and any control or monitoring equipment; 3. corrective actions taken during each period of malfunction to minimize emissions and restore normal operations; 4. records of performance tests; and 5. all required maintenance performed on air pollution control and monitoring equipment.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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))

(3) A comprehensive written report on the results of the performance tests, conducted to demonstrate compliance with 40 CFR 63.6602, shall be signed by the person or persons responsible for the tests and submitted to Ohio EPA, Central 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 Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1))

(4) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6640(b)	Submit a report of each instance in which the emission limitation in Table 2c was not met; these deviations to be reported according to the requirements of 63.6650.
40 CFR 63.6640(e)	Submit a report of each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.
40 CFR 63.6645(a)(1)	Submit all notifications required per 63.7(b) and (c); 63.8(e), (f)(4), and (f)(6); and 63.9(b) through (e), (g), and (h) that apply to the SI RICE.
40 CFR 63.6645(g)	Submit a Notification of Intent to conduct a performance test at least 60 days before the test is scheduled to begin, as required by 63.7(b)(1).
40 CFR 63.6645(h); 40 CFR 63.6630(c); and OAC rule 3745-15-04(A)	Submit a Notification of Compliance Status for each initial compliance demonstration required in Table 5 to Subpart ZZZZ, including the performance test results, before the close of business on the 60th day following the completion of the test; or within 30 days of the initial compliance demonstration if the demonstration does not include a performance test. OAC rule 3745-15-04(A) requires performance test results to be submitted within 30 days of the test date unless additional time is requested.
40 CFR 63.6650(a)	Submit each applicable report in Table 7 of Subpart ZZZZ.
40 CFR 63.6650(b)(1) to (5) and Part 63 Subpart ZZZZ	Following the initial compliance date, submit Semiannual Compliance Reports to include the information identified in 63.6650(c) through (f), as applicable to the SI RICE.

Table 7 #1	Following the initial compliance report, each subsequent report shall cover the reporting period from January 1st through June 30th and July 1st through December 31st. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31st and January 31st.
40 CFR 63.6650(c)	63.6650(c) contains the required information to be submitted in each compliance report.
40 CFR 63.6650(d)	63.6650(d) contains the required information to be submitted for each deviation from an emission or operating limitation not monitored by a continuous monitoring system (CMS).

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

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 particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA, Method 9.

(Authority for term: OAC rule 3745-17-07(A)(1)(a), OAC rule 3745-17-03(B)(1)(a), OAC rule 3745-77-07(C)(1), and 40 CFR Part 60, Appendix A)

b. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input for each emissions units (B019 and B020).

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.00991 lb/mmBtu. This emission factor is specified in U.S.EPA's reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Chapter 3: Stationary Internal Combustion Sources, Section 3.2, Table 3.2-3 (7/00).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Central District Office.

(Authority for term: OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

10.3 ppmvd formaldehyde at 15% O_2.

Applicable Compliance Method:

Initial performance tests were completed for emissions units B019 and B020 on November 21, 2013 meeting the requirements of 40 CFR 63.6612. Subsequently, emissions unit B019 was retested on September 10, 2014 due to a change in catalyst (control equipment). Should modifications to the emissions units occur, compliance with the emissions limit of 10.3 ppmvd formaldehyde at 15% O_2, as established with the initial performance test, must be demonstrated. Modifications to these emissions units may necessitate a performance test. Any future performance tests should be conducted consistent with the following terms and conditions.

The performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The engine percent load, during the performance test, shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.

The following test methods shall be employed to demonstrate compliance with the emission limitation for formaldehyde:

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

ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00: to measure O_2 at the inlet and outlet of the control device if demonstrating compliance through the percent control of CO or to determine the O_2 concentration of the stationary RICE exhaust to normalize the CO concentration.

iii. 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 inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.

iv. Method 320 or Method 323 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure formaldehyde at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure formaldehyde at the exhaust of the stationary RICE.

v. The following equation shall be used to normalize the formaldehyde concentrations to a dry basis and to 15 percent oxygen (O_2)**:

$C_{adj} = C_d (5.9 /(20.9 - \% O_2))$

Where:

C_{adj}= calculated formaldehyde concentration adjusted to 15 percent O_2.

C_d= measured concentration of formaldehyde, uncorrected.

5.9 = 20.9 percent O_2 − 15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = measured O_2 concentration, dry basis, percent.

** Optionally, the pollutant concentrations can be corrected to 15% O_2 using a CO_2 correction factor, by calculating the fuel factor (F_o value) using Method 19 results obtained during the performance test (40 CFR 63.6620(e)(2)).

The permittee shall notify the Director (Ohio EPA, Central District Office, DAPC) in writing of the scheduled performance test date at least 60 calendar days before it is scheduled, to allow the agency time to review and approve the site-specific test plan and to arrange for an observer to be present during the compliance demonstration.

Personnel from Ohio EPA, Central 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.

(Authority for term: [40 CFR 63.7(a)(2), (b)(1), and (e)(3)], [40 CFR 63.6602], [40 CFR 63.6612], [40 CFR 63.6620], [40 CFR 63.6630], [40 CFR 63.6645(a)(1)], [Part 63, Subpart ZZZZ, Table 2c #11; Table 4 #3; and Table 5 #12], [OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Any amendment to 40 CFR Part 63, Subpart ZZZZ shall supersede the Subpart ZZZZ compliance limitations and/or compliance options contained in this permit.