

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

2/21/2014

Certified Mail

Facility ID: 1431074278
Permit Number: P0099049
County: Hamilton

Mike Flaherty
Emery Oleochemicals LLC
4900 Este Avenue
Cincinnati, OH 45232-1491

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF 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 you have any questions regarding this permit, please contact the Southwest Ohio Air Quality Agency as indicated on page one of your permit.

Sincerely,



Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Southwest Ohio Air Quality Agency



FINAL

**Division of Air Pollution Control
Title V Permit
for
Emery Oleochemicals LLC**

Facility ID:	1431074278
Permit Number:	P0099049
Permit Type:	Renewal
Issued:	2/21/2014
Effective:	3/14/2014
Expiration:	3/14/2019



Division of Air Pollution Control
Title V Permit
for
Emery Oleochemicals LLC

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Final Title V Permit
Emery Oleochemicals LLC
Permit Number: P0099049
Facility ID: 1431074278
Effective Date: 3/14/2014

Authorization

Facility ID: 1431074278
Facility Description: All Other Miscellaneous Chemical Product and Preparation Manufacturing
Application Number(s): A0030723, A0030724, A0030725, A0030726, A0030727, A0030728, A0030729, A0042835
Permit Number: P0099049
Permit Description: Renewal Title V for Emery Oleochemicals LLC, which includes fossil-fuel and landfill gas-fired boilers and miscellaneous organic chemical processing operations that produce a variety of batch quantities of chemical liquid polyols and various esters.
Permit Type: Renewal
Issue Date: 2/21/2014
Effective Date: 3/14/2014
Expiration Date: 3/14/2019
Superseded Permit Number: P0099048

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

Emery Oleochemicals LLC
4900 Este Avenue
Cincinnati, OH 45232-1491

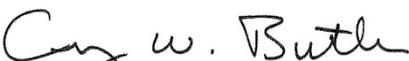
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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 Southwest Ohio Air Quality Agency. 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
Interim Director



Final Title V Permit
Emery Oleochemicals LLC
Permit Number: P0099049
Facility ID: 1431074278
Effective Date:3/14/2014

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 recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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



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

- (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 submitted scheduled 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 Southwest Ohio Air Quality Agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

These written 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 Southwest Ohio Air Quality Agency 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 Southwest Ohio Air Quality Agency 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 permit except 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 Southwest Ohio Air Quality Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (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 Southwest Ohio Air Quality Agency) 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 intermittent consistent 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 Southwest Ohio Air Quality Agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Southwest Ohio Air Quality Agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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



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, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(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 the Southwest Ohio Air Quality Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Southwest Ohio Air Quality Agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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 Southwest Ohio Air Quality Agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Southwest Ohio Air Quality Agency 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 of an 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 Southwest Ohio Air Quality Agency, 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.



Final Title V Permit
Emery Oleochemicals LLC
Permit Number: P0099049
Facility ID: 1431074278
Effective Date: 3/14/2014

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 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:

B003 – Ozone III Process Furnace

B004 – Ozone III Dowtherm Vaporizer

B007 – Ozone II Dowtherm Vaporizer

B018 – B-30 Dowtherm Vaporizer

B019 – B-28 Dowtherm Vaporizer

B046 – Bldg. 60 Recycle Gas Furnace (PTI # P0106688)

B200 – Reclaim Emergency Diesel Generator (PBR11048)

B201 – Bldg. 63 Emergency Pump

B202 – Reclaim Deep Well Emergency Diesel Pump

B204 – Bldg 44 Emergency Generator (PBR11050)

B205 – Bldg 58 Emergency Generator (PBR11051)

B206 – Bldg 63 Emergency Generator (PBR11052)

F001 – Plantwide paved roadways and parking areas

J003 – Raw Material Unloading (PTI # 14-4057)

J004 – Fatty Acid Unloading Line (PTI # 14-4085)

P014 – Glycerine Refining (PTI # 14-321)

P018 – B-70 fatty acid still (PTI # 14-318)

P020 – Continuous hydrogenation (PTI # 14-322)

P021 – Glycerine concentration (PTI # 14-320)

P036 – C-5 Autoclave (PTI # 14-4084)

P073 – Collection and recycle of coconut fatty acids (PTI # 14-3010)



P074 – Ozone Acids Catalyst Process (PTI # 14-4576)

P092 – Wastewater acidulation vessel (PTI # 14-3229)

P093 – B-31 fatty acid still (PTI # 14-3937)

P096 – Azelaic purification II (PTI # 14-4083)

P099 – High pressure splitter HPS-8 (PTI # 14-4264)

P901 – Fatty alcohol flaking (PTI # 14-4154)

T001 – Y-546 Oleic acid storage tank (PTI # 14-1296)

T003 – Y-538 Ester fuels storage tank (PTI # 14-1492)

T063 – Y-556 Raw material storage tank (PTI # 14-4057)

T064 – Y-327 Fatty acid storage tank (PTI # 14-4085)

T065 – Y-278 Residue storage tank (PTI # 14-4083)

T069 – Y-5830 Methanol storage tank (PTI # 14-05155)

T205 – 274,000 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

T206 – 274,000 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

T207 – 274,000 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

T208 – 274,000 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

T209 – 274,000 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

T210 – 142,800 gallon Processed Fatty Acid (PFA) Storage Tank (PTI # P0109139)

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and DDDDD, National Emission Standards for Hazardous Air Pollutants (NESHAP) Industrial, Commercial, and Institutional Boilers and Process Heaters: B003, B004, B007, B018, B019, B042, B043, B044, B045, and B046. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines: B200, B201, B202, B204, B205, and B206. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.



(Authority for term: 40 CFR Part 63)

5. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subparts A and Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (NSPS): B042, B043, and B044. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 60)

6. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subparts A and Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS): B045. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 60)

7. 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants (NESHAP) Miscellaneous Organic Chemical Manufacturing (MON) Facility-Wide Requirements:

- a) The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants (NESHAP) Miscellaneous Organic Chemical Manufacturing (MON): P010, P017, P048, P053, T069, and P074. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.
- b) The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart FFFF. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 12 of 40 CFR Part 63, Subpart FFFF. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart FFFF and Subpart A.
- c) The permittee shall submit semiannual reports for each emissions unit subject to the provisions of 40 CFR Part 63, Subpart FFFF that contain the following information in (1) through (10) below:
- (1) Company name and address;
 - (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - (3) Date of report and beginning and ending dates of the reporting period;
 - (4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction;



- (5) The compliance report must contain the information on deviations, as defined in 40 CFR 63.2550, according to a. through d. below:
- a. If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.
 - b. For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the following. This includes periods of SSM.
 - i. The total operating time of the affected source during the reporting period.
 - ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
 - iii. Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.
 - c. For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the following. This includes periods of SSM.
 - i. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - ii. The date, time, and duration that each CEMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
 - iii. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
 - iv. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.
 - v. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
 - vi. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.



- vii. An identification of each HAP that is known to be in the emission stream.
 - viii. A brief description of the process units.
 - ix. A brief description of the CMS.
 - x. The date of the latest CMS certification or audit.
 - xi. Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.
 - xii. The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.
- d. If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by 40 CFR 63.2525(e) that exceeds an applicable HAP usage or emissions threshold.
- (6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in 40 CFR 63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.
 - (7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.
 - (8) Records of process units added to a PUG as specified in 40 CFR 63.2525(i)(4) and records of primary product redeterminations as specified in 40 CFR 63.2525(i)(5);
 - (9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR Part 65.
 - (10) Notification of process change.
 - a. Except as specified in paragraph (10)b. below, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not



constitute a process change. The notification must include the following information.

- i. A description of the process change.
 - ii. Revisions to any of the information reported in the original notification of compliance status report under 40 CFR 63.2520(d).
 - iii. Information required by the notification of compliance status report under 40 CFR 63.2520(d) for changes involving the addition of processes or equipment at the affected source.
- b. You must submit a report 60 days before the scheduled implementation date of any of the changes identified below.
- i. Any change to the information contained in the pre-compliance report.
 - ii. A change in the status of a control device from small to large.
 - iii. A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 CFR 63.2460(b)(6)(i).
- (11) The first semiannual reports shall cover the period from January 1 through June 30 of each year. This first semiannual report shall be postmarked or delivered no later than August 31 of that year. The second semiannual reports shall cover the period from July 1 through December 31 of each year. This second semiannual report shall be postmarked or delivered no later than February 28th of the next year.
- d) There are no Group 1 wastewater streams at this facility subject to waste water provisions of 40 CFR 63.2485. Therefore, the requirements of 40 CFR 63.2485 do not apply.
- e) There are no Group 1 transfer racks at this facility. Therefore, the requirements of 40 CFR 63.2475 do not apply.
- f) In accordance with 40 CFR 63.2480, the permittee shall comply with the following provisions of 40 CFR Part 63 Subpart UU:
- (1) 40 CFR 63.1022 Standards: Equipment identification;
 - (2) 40 CFR 63.1023 Standards: Instrument and sensory monitoring for leaks;
 - (3) 40 CFR 63.1024 Standards: Leak repair;
 - (4) 40 CFR 63.1025 Standards: Valves in gas/vapor service and in light liquid service;
 - (5) 40 CFR 63.1026 Standards: Pumps in light liquid service;
 - (6) 40 CFR 63.1027 Standards: Connectors in gas/vapor service and in light liquid service;
 - (7) 40 CFR 63.1028 Standards: Agitators in gas/vapor service and in light liquid service;



- (8) 40 CFR 63.1029 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards;
- (9) 40 CFR 63.1030 Standards: Pressure relief devices in gas and vapor service standards;
- (10) 40 CFR 63.1032 Standards: Sampling connection systems;
- (11) 40 CFR 63.1033 Standards: Open-ended valves or lines;
- (12) 40 CFR 63.1034 Standards: Closed vent systems and control devices; or emissions routed to a fuel gas system or process standards;
- (13) 40 CFR 63.1035 Quality improvement program for pumps;
- (14) 40 CFR 63.1036 Alternative means of emission limitation: Batch processes;
- (15) 40 CFR 63.1037 Alternative means of emission limitation: Enclosed-vented process units or affected facilities;
- (16) 40 CFR 63.1038 Recordkeeping requirements; and
- (17) 40 CFR 63.1039 Reporting requirements.



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Emery Oleochemicals LLC
Permit Number: P0099049
Facility ID: 1431074278
Effective Date: 3/14/2014

C. Emissions Unit Terms and Conditions



1. B042, Boiler No. 7

Operations, Property and/or Equipment Description:

Boiler #7 - 225 MMBtu/hr boiler fired with natural gas, landfill gas or No.2 fuel oil

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) Best Available Technology (BAT) [PTI P0109124, issued July 17, 2013]	The following emission limitations shall not be exceeded: <u>When burning natural gas:</u> Particulate emissions (PE) shall not exceed 0.0075 lb/MMBtu of actual heat input*. Particulate Matter less than 10 microns in diameter (PM ₁₀) emissions shall not exceed 0.0075 lb/MMBtu of actual heat input*. Sulfur Dioxide (SO ₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input*. Nitrogen Oxides (NO _x) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis. Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*. <u>When burning No.2 fuel oil:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Particulate emissions (PE) shall not exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Nitrogen Oxides (NOx) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.037 lb/MMBtu of actual heat input*.</p> <p><u>When burning landfill gas:</u></p> <p>Particulate emissions (PE) shall not exceed 0.030 lb/MMBtu of actual heat input*.</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 0.030 lb/MMBtu of actual heat input*.</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.06 lb/MMBtu of actual heat input.</p> <p>Nitrogen Oxides (NOx) emissions shall not exceed 0.20 lb/MMBtu of actual heat input, on a rolling 30-day average basis.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*.</p> <p>The particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3) when combusting No. 2 fuel oil is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with all applicable emission</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>limitations (including any less stringent emission limitation) after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-31-05(D), 40 CFR Part 60 Subpart Db, and 40 CFR Part 63, Subpart DDDDD.</p> <p>See c)(1) and c)(8).</p>
b.	<p>OAC rule 3745-31-05(D) Synthetic Minor to Avoid Nonattainment New Source Review and Prevention of Significant Deterioration</p>	<p>Particulate emissions (PE) shall not exceed 84.99 tons per year.**</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 84.99 tons per year.**</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 1,733.59 tons per year.**</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 966.27 tons per year.**</p> <p>Carbon monoxide (CO) emissions shall not exceed 156.36 tons per year.**</p> <p>Volatile organic compound (VOC) emissions shall not exceed 57.55 tons per year.**</p> <p>Lead emissions shall not exceed 1.32 tons per year.**</p> <p>**as a rolling, 12-month summation from emissions units B027⁽¹⁾, B042, B043, B044, and B045, combined. ⁽¹⁾[B027 was permanently shut down by the permittee on August 14, 2013] See c)(2) through c)(7).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emission from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(C)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06(A)	This emissions unit is exempt from OAC rule 3745-18-06(D) and OAC rule 3745-18-37 during any calendar day in which natural gas is the only fuel burned.
g.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 lb/MMBtu of actual heat input and 5.32 tons per year.</p> <p>Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 ton per year.</p> <p>See b)(2)f.</p>
i.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)g.
j.	<p>40 CFR Part 60, Subparts A and Db (40 CFR 60.40b-60.49b)</p> <p>Standards of Performance (NSPS) for Industrial-Commercial-Institutional Steam Generating Units</p>	<p>The nitrogen oxides (NO_x) emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.060 lb/MMBtu of actual heat input when firing No. 2 fuel oil or landfill gas.</p> <p>The particulate matter emission limitation specified by this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)b. – b)(2)e. and c)(9).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
k.	<p>40 CFR Part 63, Subpart DDDDD (40 CFR Part 63.7480-7575)</p> <p>National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters</p> <p>[In accordance with 40 CFR 63.7499 and 63.7575, this emissions unit is an existing boiler designed to burn liquid fuel (No. 2 fuel oil) or gas 1 fuel (natural gas, landfill gas). Therefore, the unit may be subject to the subcategory requirements for units designed to burn liquid fuel, units designed to burn light liquid fuel, and/or units designed to burn gas 1 fuel as defined in this subpart. The permittee shall comply with the emission limitations and operating limitations for the applicable fuel subcategory specified in this section.]</p>	<p>Applicable Emission Limits in Table 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63.</p> <p>Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 31, 2016, except as provided in 63.6(i).</p>
l.	40 CFR Part 63.1-15 (40 CFR 63.7565)	Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, the visible emission limitation and the use of low-NOx burners.
- b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx and O₂ monitoring systems, designed to ensure continuous



valid and representative readings of NO_x and O₂ emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x and O₂ monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.13, 40 CFR 60.48b(e), and 40 CFR Part 60, Appendix F]

- d. The continuous emission monitoring systems consist of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.2, and Appendix F to 40 CFR Part 60]

- e. Pursuant to 40 CFR 60.48b(l), the permittee is not required to operate a COMS on emissions unit B042 provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO₂ emissions rate no greater than 0.060 lb/MMBtu, and the unit operates according to the written site specific monitoring plan approved by the Southwest Ohio Air Quality Agency (SWOQA).

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

- g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC and lead emissions from this air contaminant source since the uncontrolled potential to emit for VOC's and lead is less than 10 tons/year.

This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.



c) Operational Restrictions

- (1) The permittee shall burn only natural gas, No. 2 fuel oil, or landfill gas in this emissions unit.

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

- (2) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[B * 5.7 \text{ lb/mmscf} + G_{B042} + G_{B043} + G_{B044} + G_{B045}] / 2000 \text{ lbs/ton} \leq 156.36 \text{ tons of CO per 12-month rolling period}$$

Where:

B = landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and,

G_{B0XX} = CO emissions for B042, B043, B044 and B045 calculated based on the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) and the applicable emission factors for No. 2 fuel oil from AP- 42 Section 1.3 (9/98), (in pounds).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (3) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[A_{B045} * 100 \text{ lb/mmscf} + F * H * 0.07 \text{ lb/MMBtu} + G_{B042} + G_{B043} + G_{B044}] / 2000 \text{ lbs/ton} \leq 966.27 \text{ tons of NO}_x \text{ per 12-month rolling period}$$

Where:

A_{B045} = natural gas usage in B045 for the 12-month period (in mmscf);

F = number 2 fuel oil usage in B045 for the 12-month period (in kgal);

G_{B0XX} = NO_x emissions for B042, B043, and B044 calculated based on data from NO_x CEMS for the 12-month period (in pounds); and,

H = heat content of No. 2 fuel oil in MMBtu/kgal.



The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shutdown by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (4) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+B) * 5.5 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * 0.25 \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 57.55 \text{ tons of VOC per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf); and
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (5) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+ B) * 0.60 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * (142 * S) \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 1,733.59 \text{ tons of SO}_2 \text{ per 12-month rolling period}$$

Where:



- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf);
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- S = sulfur content of number 2 fuel oil (wt %).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (6) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[7.6 \text{ lbs/mmscf} * (A + B) + 2 \text{ lbs/kgal} * (F_{B045} + F_{B044} + F_{B043} + F_{B042})] / 2000 \text{ lbs/ton} \leq 84.99 \text{ tons of PE/PM}_{10} \text{ per 12-month rolling period}$$

Where:

- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.



[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (7) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A + B) * 5.00E-04 \text{ lb/mmscf} + F * H * 9.00E-06 \text{ lb/MMBtu}] / 2000 \text{ lbs/ton} \leq 1.32 \text{ tons of lead per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf);
- F = total number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- H = heat content of number 2 fuel oil in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (8) The permittee shall install, operate, and maintain low-NOx burners, that comply with the NOx emission limitations listed in term b)(1), at all times when operating this emissions unit.

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

- (9) The quality of the No. 2 fuel oil and landfill gas burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.060 lb/MMBtu of actual heat input on an "as-received basis".

[Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]

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



63.7500, 63.7515(d), 63.7540, and Table 3 to Subpart DDDDD	annual tune-up requirements
63.7500 and Table 3 to Subpart DDDDD	one-time energy assessment requirements
63.7500(a)(3)	general duty to minimize emissions
63.7500 and Table 4 to Subpart DDDDD	requirements for fuel analysis, operating load based upon performance testing, and oxygen analyzer systems
63.7505	general compliance requirements

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, No. 2 fuel oil, or landfill gas the permittee shall maintain a record of the type and quantity of fuel burned in emissions unit B042.

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

- (2) The permittee may use fuel analysis reports from the supplier to determine the heating value of natural gas and landfill gas along with the sulfur content of landfill gas [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. Each gas fuel batch is defined by the most recent analysis received from the supplier(s). These analyses must be obtained at least quarterly when burned [see 40 CFR 60.48b(j)(2) and 40 CFR 60.49b(r)].

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Db]

- (3) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu.) [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. The records shall also include certification from the fuel oil supplier that the oil meets the definition of very low sulfur distillate oil [see 40 CFR 60.49b(r)].

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content



and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Db]

- (4) The permittee shall maintain monthly records of the following for each fuel batch-firing scenario burned in emissions unit B042:
- a. the quantity of each fuel burned (standard cubic feet of natural gas and landfill gas, gallons of No. 2 fuel oil);
 - b. the heat content of each fuel (in Btu/mmscf for natural gas and landfill gas, and MMBtu/kgal for No. 2 fuel oil).;
 - c. the sulfur content of No. 2 fuel oil and landfill gas (weight% or gr/100 dscf); and
 - d. the SO₂ emissions from each fuel (lb/MMBtu) calculated based on the sulfur and heat content analyses in d)(2) and d)(3).

A fuel batch firing scenario is defined as a combination of fuels burned with specific characteristics determined by the fuel sampling results. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, and/or when there is a change in the fuel or combination of fuels burned in emissions unit B042.

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

- (5) The permittee shall collect and record the following information each month for emissions units B042, B043, B044, and B045 combined:
- a. the emissions of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead for each month, in tons; and
 - b. the updated rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead emissions, in tons. This shall include information for the current month and the preceding eleven calendar months.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (6) The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from emissions unit B042 in pounds per MMBtu. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall operate the continuous emissions monitoring system (CEMS) and record data during all periods of operation except for continuous monitoring systems breakdowns and repairs. Data shall be recorded during calibration checks, zero adjustments, and span adjustments.



The permittee shall operate the CEMS with a NO_x span value of 500 ppm as specified in 40 CFR 60.48b(e)(2)(i) or as determined in accordance with 40 CFR 60.48b(e)(2)(ii).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NO_x monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]

- (8) The permittee shall maintain records of the following data obtained by the NO_x CEMS for each operating day as specified in 40 CFR 60.49b(g):

- a. calendar date;
- b. emissions of nitrogen oxides in pounds per MMBtu actual heat input on an hourly average basis;
- c. emissions of nitrogen oxides in pounds per MMBtu actual heat input on a rolling, 30-day average basis;
- d. identification of all days where the rolling, 30-day average NO_x emissions rate exceed the pound per MMBtu emission limitation, the reason for the excess emissions and a description of the corrective actions taken;
- e. identification of operating days for which sufficient NO_x emissions data has not been obtained, the reason for not obtaining sufficient data, and a description of the corrective actions taken;
- f. identification of all periods of time which emissions data has been excluded from the calculation of the average emission rate and the reason for excluding the data;
- g. a records of the "F" factor used in the calculation of the rolling, 30-day average NO_x emission rate and the method used to determine the "F" factor;
- h. identification of the times when NO_x concentration exceeded the span of the continuous monitoring system;
- i. description of any modifications to the CEMS that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3 of 40 CFR Part 60, Appendix B;
- j. results of daily CEMS drift tests and quarterly accuracy assessments as required by Procedure 1 of 40 CFR Part 60, Appendix F; and



- k. results of daily zero/span calibration checks and magnitude of manual calibration adjustments.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (9) When NO_x emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emissions data by using standby monitoring systems, U.S. EPA Method 7 or 7a of 40 CFR Part 60, Appendix A, or other approved reference methods to provide data for a minimum of 75% of the operating hours in a day, in at least 22 out of 30 successive days of operation.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]

- (11) The permittee shall operate and maintain equipment to continuously monitor and record O₂ emitted from this emissions unit in percent O₂. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to:

- a. the percent O₂ with each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. results of quarterly cylinder gas audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);
- e. hours of operation of the emissions unit, continuous O₂ monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous O₂ monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O₂ monitoring system; as well as,



- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (12) The permittee shall maintain all of the records specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (13) This emissions unit shall be operated and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain records verifying that necessary maintenance activities have been performed on this emissions unit.

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

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

63.7525	monitoring, installation, operating, and maintenance requirements
63.7535, 63.7540, and Table 8 to Subpart DDDDD	requirements for monitoring data and continuous compliance demonstration
63.7555	required overall records to be maintained
63.7560	record format and retention requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0109124, issued on 7/17/2013:d)(1) through d)(14). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.



e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the calculated sulfur dioxide emission rates from d)(2) and d)(3) above. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports to the Southwest Ohio Air Quality Agency which identify all exceedances of the rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC, and lead emissions for each calendar month for emissions units B042, B043, B044, and B045 combined.

The quarterly 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 rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (3) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any fuel burned in this emissions unit other than natural gas, No. 2 fuel oil or landfill gas. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

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

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Southwest Ohio Air Quality Agency documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

- a. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

- i. the facility name and address;
- ii. the manufacturer and model number of the continuous NO_x and other associated monitors;



- iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total NO_x emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter, and shall contain the information specified in d)(8).

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O₂ monitoring system:



- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O₂ monitoring system downtime and malfunction while the emissions unit was on line.
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous O₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the total operating time (hours) of the emissions unit;
 - v. the total operating time of the continuous O₂ monitoring system while the emissions unit was in operation;
 - vi. results and dates of quarterly cylinder gas audits;
 - vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
 - viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O₂ monitor out-of-control and the compliant results following any corrective actions;
 - ix. the date, time, and duration of any/each malfunction* of the continuous O₂ monitoring system while the emissions unit was in operation;
 - x. the date, time, and duration of any downtime* of the continuous O₂ monitoring system while the emissions unit was in operation; and
 - xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit



[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (6) The permittee shall submit quarterly reports as specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l). These reports shall be submitted as specified under 40 CFR Part 60.49b(h).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (7) The permittee shall submit annual reports which specify the total PE, PM₁₀, SO₂, NO_x, VOC, CO and lead emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

- (8) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, in addition to e)(4)-e)(6) above, including the following sections:

60.49b(a)	initial notification requirements
60.49b(b)	initial performance test data

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]

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

63.7530(d)-(g) and 63.7545	Notification of Compliance Status requirements
63.7550 and Table 9 to Subpart DDDDD	content and submission of compliance reports

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (10) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0109124, issued on 7/17/2013: e)(1) – e)(9). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements



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

a. Emission Limitations:

When burning natural gas, this emissions unit shall not exceed:

0.0075 pound of PE/MMBtu;

0.0075 pound of PM₁₀/MMBtu;

0.0006 pound of SO₂/MMBtu; and

0.082 pound of CO/MMBtu.

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.015 pound of PE/MMBtu;

0.015 pound of PM₁₀/MMBtu; and

0.037 pound of CO/MMBtu.

When burning landfill gas, this emissions unit shall not exceed:

0.082 pound of CO/MMBtu

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by multiplying the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) by 1 ft³/1020 Btu and the applicable emission factors for No. 2 fuel oil from AP-42 Section 1.3 (5/10) by 1000 gal/140 MMBtu. The CO emission factor for natural gas was assumed to be equivalent to landfill gas.



If required, the permittee shall demonstrate compliance with the PE, PM₁₀, SO₂ (natural gas) and CO lb/MMBtu emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, 6, 10, 25 and 201.

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

b. Emission Limitations:

0.10 pound of NO_x/MMBtu, when burning natural gas, on a rolling 30-day average basis; and

0.10 pound of NO_x/MMBtu, when burning No. 2 fuel oil, on a rolling 30-day average.

0.20 pound of NO_x/MMBtu, when burning landfill gas, on a rolling 30-day average.

Applicable Compliance Method:

Ongoing compliance with the NO_x emission limitations contained in this permit, including 40 CFR Part 60, Subpart Db, shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

c. Emission Limitation:

When burning No.2 fuel oil or landfill gas this emissions unit shall not exceed: 0.06 pound of SO₂/MMBtu of actual heat input.

Applicable Compliance Method:

For fuel oil: $ER = (1 \times 10^6)/H \times D \times S \times 1.974$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

For landfill gas: $ER = (1 \times 10^6)/H \times D \times S \times 1.998$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;



H = the heat content of the gaseous fuel in Btu per standard cubic foot;

D = the density of the gaseous fuel in pounds per standard cubic foot; and

S = the decimal fraction of sulfur in the gaseous fuel.

Compliance with the lb/MMBtu emission limitations shall be based upon the record keeping requirements in d)(2)-d)(4).

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

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

d. Emission Limitation:

Visible particulate emission from the emissions unit B042 stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

When combusting No. 2 fuel oil, compliance may be demonstrated in accordance with the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

When combusting gaseous fuels, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1). No visible emissions observations are specifically required to demonstrate compliance with this emission limitation when combusting gaseous fuels but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-17-07(A)(1), and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

e. Emission Limitations:

VOC emissions shall not exceed 0.0054 lb/MMBtu and 5.32 TPY.

Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 TPY.

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by using the applicable VOC and lead emission factors from AP-42 for the worst case fuel burned in this emissions unit.



The annual emission limitations are determined by multiplying the lb/MMBtu emission limitation by the MMBtu/hr rating of the emissions unit then multiplying by 8760 hours/year then divide by 2000.

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

f. Emission Limitations:

The combined emissions from emissions units B042, B043, B044, and B045 shall not exceed 84.99 tons per year of PE, 84.99 tons per year of PM₁₀, 1,733.59 tons per year of SO₂, 966.27 tons per year of NO_x, 156.36 tons per year of CO, 57.55 tons per year of VOC, and 1.32 tons per year of lead, as a rolling, 12-month summation of the emissions.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping in d)(5).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

g. Emission Limitations:

Particulate emissions shall not exceed 0.030 pound per MMBtu of actual heat input when burning landfill gas.

PM₁₀ emissions shall not exceed 0.030 pound per MMBtu of actual heat input when burning landfill gas.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the lb/MMBtu PE and PM₁₀ emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, and 201.

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

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

63.7510, 63.7530, and Tables 5, 6, and 7 of Subpart DDDDD	initial compliance requirements
63.7515	requirements for subsequent performance tests, fuel analyses, and tune-ups



63.7520, 63.7521 and Tables 5 and 6 to Subpart DDDDD	stack test and fuel analysis procedures
63.7540 and Table 8 to Subpart DDDDD	continuous compliance requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0109124, issued on 7/17/2013: f)(1) - f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.



2. B043, Boiler No. 8

Operations, Property and/or Equipment Description:

Boiler #8 - 225 MMBtu/hr boiler fired with natural gas or No. 2 fuel oil

- 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) Best Available Technology (BAT) [PTI P0109124, issued July 17, 2013]	The following emission limitations shall not be exceeded: <u>When burning natural gas:</u> Particulate emissions (PE) shall not exceed 0.0075 lb/MMBtu of actual heat input*. Particulate Matter less than 10 microns in diameter (PM ₁₀) emissions shall not exceed 0.0075 lb/MMBtu of actual heat input*. Sulfur Dioxide (SO ₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input*. Nitrogen Oxides (NO _x) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis. Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*. <u>When burning No.2 fuel oil:</u> Particulate emissions (PE) shall not



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Nitrogen Oxides (NOx) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.037 lb/MMBtu of actual heat input*.</p> <p>The particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3) when combusting No. 2 fuel oil is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation) after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-31-05(D), 40 CFR Part 60 Subpart Db and 40 CFR Part 63, Subpart DDDDD.</p> <p>See c)(1) and c)(8).</p>
b.	<p>OAC rule 3745-31-05(D) Synthetic Minor to Avoid Nonattainment New Source Review and Prevention of Significant Deterioration</p>	<p>Particulate emissions (PE) shall not exceed 84.99 tons per year.**</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 84.99 tons per year.**</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Sulfur dioxide (SO₂) emissions shall not exceed 1,733.59 tons per year.**</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 966.27 tons per year.**</p> <p>Carbon monoxide (CO) emissions shall not exceed 156.36 tons per year.**</p> <p>Volatile organic compound (VOC) emissions shall not exceed 57.55 tons per year.**</p> <p>Lead emissions shall not exceed 1.32 tons per year.**</p> <p>**as a rolling, 12-month summation from emissions units B027⁽¹⁾, B042, B043, B044, and B045, combined.</p> <p>⁽¹⁾[B027 was permanently shut down by the permittee on August 14, 2013]</p> <p>See c)(2) through c)(7).</p>
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emission from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(A)	This emissions unit is exempt from OAC rule 3745-18-06(D) and OAC rule 3745-18-37 during any calendar day in which natural gas is the only fuel burned.
f.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 lb/MMBtu of actual heat input and 5.32 tons per year.</p> <p>Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 ton per year.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)f.
h.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)g.
i.	<p>40 CFR Part 60, Subparts A and Db</p> <p>Standards of Performance (NSPS) for Industrial-Commercial-Institutional Steam Generating Units</p>	<p>The nitrogen oxides (NO_x) emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.06 lb/MMBtu of actual heat input when firing No. 2 fuel oil.</p> <p>The particulate matter emission limitation specified by this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See b)(2)b. – b)(2)e. and c)(9).</p>
j.	<p>40 CFR Part 63, Subpart DDDDD (40 CFR Part 63.7480-7575)</p> <p>National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters</p> <p>[In accordance with 40 CFR 63.7499 and 63.7575, this emissions unit is an existing boiler designed to burn liquid fuel (No. 2 fuel oil) or gas 1 fuel (natural gas). Therefore, the unit may be subject to the subcategory requirements for units designed to burn liquid fuel, units designed to burn light liquid fuel, and/or units designed to burn gas 1 fuel as defined in this subpart. The permittee shall comply with the emission limitations and operating limitations for the applicable fuel subcategory specified in this section.]</p>	<p>Applicable Emission Limits in Table 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63.</p> <p>Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 31, 2016, except as provided in 63.6(i).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
k.	40 CFR Part 63.1-15 (40 CFR 63.7565)	Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, the visible emission limitation and the use of low-NOx burners.
- b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx and O₂ monitoring systems, designed to ensure continuous valid and representative readings of NOx and O₂ emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx and O₂ monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.13, 40 CFR 60.48b(e), and 40 CFR Part 60, Appendix F]

- d. The continuous emission monitoring systems consist of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.2, and Appendix F to 40 CFR Part 60]

- e. Pursuant to 40 CFR 60.48b(l), the permittee is not required to operate a COMS on emissions unit B043 provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO₂ emissions rate no greater



than 0.060 lb/MMBtu, and the unit operates according to the written site specific monitoring plan approved by the Southwest Ohio Air Quality Agency (SWOAQA).

- f. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC and lead emissions from this air contaminant source since the uncontrolled potential to emit for VOC's and lead is less than 10 tons/year.

This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.

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

- (2) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[B * 5.7 \text{ lb/mm}^3\text{scf} + G_{B042} + G_{B043} + G_{B044} + G_{B045}] / 2000 \text{ lbs/ton} \leq 156.36 \text{ tons of CO per 12-month rolling period}$$

Where:

B = landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and,

G_{B0XX} = CO emissions for B042, B043, B044 and B045 calculated based on the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) and the applicable emission factors for No. 2 fuel oil from AP- 42 Section 1.3 (9/98), (in pounds).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.



⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (3) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[A_{B045} * 100 \text{ lb/mmscf} + F * H * 0.07 \text{ lb/MMBtu} + G_{B042} + G_{B043} + G_{B044}]/2000 \text{ lbs/ton} \leq 966.27 \text{ tons of NO}_x \text{ per 12-month rolling period}$$

Where:

- A_{B045} = natural gas usage in B045 for the 12-month period (in mmscf);
- F = number 2 fuel oil usage in B045 for the 12-month period (in kgal);
- G_{B0XX} = NO_x emissions for B042, B043, and B044 calculated based on data from NO_x CEMS for the 12-month period (in pounds);
- H = heat content of No. 2 fuel oil in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (4) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+B) * 5.5 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * 0.25 \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 57.55 \text{ tons of VOC per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf); and,



F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (5) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A + B) * 0.60 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * (142 * S) \text{ lb/kgal}] / 2000 \text{ lbs/ton} \leq 1,733.59 \text{ tons of SO}_2 \text{ per 12-month rolling period}$$

Where:

A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);

B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf);

F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal);

S = sulfur content of number 2 fuel oil (wt %)

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (6) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:



$$7.6 \text{ lbs/mm}^3\text{scf} * (A + B) + 2 \text{ lbs/kgal} * (F_{B045} + F_{B044} + F_{B043} + F_{B042})/2000 \text{ lbs/ton} \leq 84.99 \text{ tons of PE/PM}_{10} \text{ per 12-month rolling period}$$

Where:

- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and,
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (7) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A + B) * 5.00\text{E-}04 \text{ lb/mm}^3\text{scf} + F * H * 9.00\text{E-}06 \text{ lb/MMBtu}]/2000 \text{ lbs/ton} \leq 1.32 \text{ tons of lead per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf);
- F = total number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- H = heat content of number 2 fuel oil, in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.



⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (8) The permittee shall install, operate, and maintain low-NOx burners, that comply with the NOx emission limitations listed in b)(1), at all times when operating this emissions unit.

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

- (9) The quality of the No. 2 fuel oil and natural gas burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.06 lb/MMBtu of actual heat input on an "as-received basis".

[Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]

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

63.7500, 63.7515(d), 63.7540, and Table 3 to Subpart DDDDD	annual tune-up requirements
63.7500 and Table 3 to Subpart DDDDD	one-time energy assessment requirements
63.7500(a)(3)	general duty to minimize emissions
63.7500 and Table 4 to Subpart DDDDD	requirements for fuel analysis, operating load based upon performance testing, and oxygen analyzer systems
63.7505	general compliance requirements

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]



d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas and/or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in emissions unit B043.

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

- (2) The permittee may use fuel analysis reports from the supplier to determine the heating value of natural gas. Each natural gas fuel batch is defined by the most recent analysis received from the supplier(s). These analyses must be obtained at least quarterly when burned [see 40 CFR 60.48b(j)(2) and 40 CFR 60.49b(r)].

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Db]

- (3) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu.) [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. The records shall also include certification from the fuel oil supplier that the oil meets the definition of very low sulfur distillate oil [see 40 CFR 60.49b(r)].

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (4) The permittee shall maintain monthly records of the following:
- a. the quantity of each fuel burned (standard cubic feet of natural gas, gallons of no. 2 fuel oil);
 - b. the heat content of each fuel (Btu per standard cubic feet, Btu per gallon);
 - c. the sulfur content of each fuel (weight% or gr/100 dscf); and
 - d. the SO₂ emissions from each fuel (lb/MMBtu) calculated based on the sulfur and heat content analyses in d)(2) and d)(3).

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



- (5) The permittee shall collect and record the following information each month for emissions units B042, B043, B044, and B045 combined:
- a. the emissions of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead for each month, in tons; and
 - b. the updated rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead emissions, in tons. This shall include information for the current month and the preceding eleven calendar months.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (6) The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from emissions unit B043 in pounds per MMBtu. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall operate the continuous emissions monitoring system (CEMS) and record data during all periods of operation except for continuous monitoring systems breakdowns and repairs. Data shall be recorded during calibration checks, zero adjustments, and span adjustments.

The permittee shall operate the CEMS with a NO_x span value of 500 ppm as specified in 40 CFR 60.48b(e)(2)(i) or as determined in accordance with 40 CFR 60.48b(e)(2)(ii).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NO_x monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]

- (8) The permittee shall maintain records of the following data obtained by the NO_x CEMS for each operating day as specified in 40 CFR 60.49b(g):
- a. calendar date;
 - b. emissions of nitrogen oxides in pounds per MMBtu actual heat input on an hourly average basis;
 - c. emissions of nitrogen oxides in pounds per MMBtu actual heat input on a rolling, 30-day average basis;



- d. identification of all days where the rolling, 30-day average NO_x emissions rate exceed the pound per MMBtu emission limitation, the reason for the excess emissions and a description of the corrective actions taken;
- e. identification of operating days for which sufficient NO_x emissions data has not been obtained, the reason for not obtaining sufficient data, and a description of the corrective actions taken;
- f. identification of all periods of time which emissions data has been excluded from the calculation of the average emission rate and the reason for excluding the data;
- g. a records of the "F" factor used in the calculation of the rolling, 30-day average NO_x emission rate and the method used to determine the "F" factor;
- h. identification of the times when NO_x concentration exceeded the span of the continuous monitoring system;
- i. description of any modifications to the CEMS that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3 of 40 CFR Part 60, Appendix B;
- j. results of daily CEMS drift tests and quarterly accuracy assessments as required by Procedure 1 of 40 CFR Part 60, Appendix F; and
- k. results of daily zero/span calibration checks and magnitude of manual calibration adjustments.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (9) When NO_x emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emissions data by using standby monitoring systems, U.S. EPA Method 7 or 7a of 40 CFR Part 60, Appendix A, or other approved reference methods to provide data for a minimum of 75% of the operating hours in a day, in at least 22 out of 30 successive days of operation.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]



- (11) The permittee shall operate and maintain equipment to continuously monitor and record O₂ emitted from this emissions unit in percent O₂. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to:

- a. the percent O₂ with each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. results of quarterly cylinder gas audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);
- e. hours of operation of the emissions unit, continuous O₂ monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous O₂ monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O₂ monitoring system; as well as,
- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (12) The permittee shall maintain all of the records specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (13) This emissions unit shall be operated and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain records verifying that necessary maintenance activities have been performed on this emissions unit.

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

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



63.7525	monitoring, installation, operating, and maintenance requirements
63.7535, 63.7540, and Table 8 to Subpart DDDDD	requirements for monitoring data and continuous compliance demonstration
63.7555	required overall records to be maintained
63.7560	record format and retention requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0109124, issued on 7/17/2013:d)(1) through d)(14). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the calculated sulfur dioxide emission rates from d)(2) and d)(3) above. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports to the Southwest Ohio Air Quality Agency which identify all exceedances of the rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC, and lead emissions for each calendar month for emissions units B042, B043, B044, and B045 combined.

The quarterly 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 rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (3) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.



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

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Southwest Ohio Air Quality Agency documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NOx and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total NOx emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;
 - viii. results and dates of quarterly cylinder gas audits;
 - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
 - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;
 - xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;



- xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter, and shall contain the information specified in d)(8).

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O₂ monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O₂ monitoring system downtime and malfunction while the emissions unit was on line.
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous O₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the total operating time (hours) of the emissions unit;
 - v. the total operating time of the continuous O₂ monitoring system while the emissions unit was in operation;
 - vi. results and dates of quarterly cylinder gas audits;



- vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
- viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O₂ monitor out-of-control and the compliant results following any corrective actions;
- ix. the date, time, and duration of any/each malfunction* of the continuous O₂ monitoring system while the emissions unit was in operation;
- x. the date, time, and duration of any downtime* of the continuous O₂ monitoring system while the emissions unit was in operation; and
- xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (6) The permittee shall submit quarterly reports as specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l). These reports shall be submitted as specified under 40 CFR Part 60.49b(h).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (7) The permittee shall submit annual reports which specify the total PE, PM₁₀, SO₂, NO_x, VOC, CO and lead emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

- (8) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, in addition to e)(4) - e)(6) above, including the following sections:

60.49b(a)	initial notification requirements
60.49b(b)	initial performance test data

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]



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

63.7530(d)-(g) and 63.7545	Notification of Compliance Status requirements
63.7550 and Table 9 to Subpart DDDDD	content and submission of compliance reports

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (10) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0109124, issued on 7/17/2013: e)(1) – e)(9). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

When burning natural gas, this emissions unit shall not exceed:

0.0075 pound of PE/MMBtu;

0.0075 pound of PM₁₀/MMBtu;

0.0006 pound of SO₂/MMBtu; and

0.082 pound of CO/MMBtu.

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.015 pound of PE/MMBtu;

0.015 pound of PM₁₀/MMBtu; and

0.037 pound of CO/MMBtu.

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by multiplying the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) by 1 ft³/1020 Btu and the



applicable emission factors for No. 2 fuel oil from AP-42 Section 1.3 (5/10) by 1000 gal/140 MMBtu.

If required, the permittee shall demonstrate compliance with the PE, PM₁₀, SO₂ (natural gas) and CO lb/MMBtu emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, 6, 10, 25 and 201.

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

b. Emission Limitations:

0.1 pound of NO_x/MMBtu, when burning natural gas, on a rolling 30-day average basis; and

0.1 pound of NO_x/MMBtu, when burning No. 2 fuel oil, on a rolling 30-day average.

Applicable Compliance Method:

Ongoing compliance with the NO_x emission limitations contained in this permit, including 40 CFR Part 60, Subpart Db, shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

c. Emission Limitation:

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.06pound of SO₂/MMBtu of actual heat input.

Applicable Compliance Method:

For fuel oil: $ER = (1 \times 106)/H \times D \times S \times 1.974$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

Compliance with the lb/MMBtu emission limitations shall be based upon the record keeping requirements in d)(2)-d)(4).



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

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

d. Emission Limitation:

Visible particulate emission from the emissions unit B043 stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

When combusting No. 2 fuel oil, compliance may be demonstrated in accordance with the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

When combusting gaseous fuels, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1). No visible emissions observations are specifically required to demonstrate compliance with this emission limitation when combusting gaseous fuels but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-17-07(A)(1), and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

e. Emission Limitations:

VOC emissions shall not exceed 0.0054 lb/MMBtu and 5.32 TPY.

Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 TPY.

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by using the applicable VOC and lead emission factors from AP-42 for the worst case fuel burned in this emissions unit.

The annual emission limitations are determined by multiplying the lb/MMBtu emission limitation by the MMBtu/hr rating of the emissions unit then multiplying by 8760 hours/year then divide by 2000.

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

f. Emission Limitations:

The combined emissions from emissions units B042, B043, B044, and B045 shall not exceed 84.99 tons per year of PE, 84.99 tons per year of PM₁₀, 1,733.59 tons per year of SO₂, 966.27 tons per year of NO_x, 156.36 tons per year



of CO, 57.55 tons per year of VOC and 1.32 tons per year of lead, on a rolling, 12-month summation of the emissions.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping in d)(5).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

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

63.7510, 63.7530, and Tables 5, 6, and 7 of Subpart DDDDD	initial compliance requirements
63.7515	requirements for subsequent performance tests, fuel analyses, and tune-ups
63.7520, 63.7521 and Tables 5 and 6 to Subpart DDDDD	stack test and fuel analysis procedures
63.7540 and Table 8 to Subpart DDDDD	continuous compliance requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0109124, issued on 7/17/2013: f)(1) - f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.



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g) Miscellaneous Requirements

(1) None.



3. B044, Boiler No. 9

Operations, Property and/or Equipment Description:

Boiler #9 - 225 MMBtu/hr boiler fired with natural gas, landfill gas, or No. 2 fuel oil

- 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) Best Available Technology (BAT) [PTI P0109124, issued July 17, 2013]	The following emission limitations shall not be exceeded: <u>When burning natural gas:</u> Particulate emissions (PE) shall not exceed 0.0075 lb/MMBtu of actual heat input*. Particulate Matter less than 10 microns in diameter (PM ₁₀) emissions shall not exceed 0.0075 lb/MMBtu of actual heat input*. Sulfur Dioxide (SO ₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input*. Nitrogen Oxides (NO _x) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis. Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*. <u>When burning No.2 fuel oil:</u> Particulate emissions (PE) shall not



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 0.015 lb/MMBtu of actual heat input*.</p> <p>Nitrogen Oxides (NO_x) emissions shall not exceed 0.1 lb/MMBtu of actual heat input, on a rolling 30-day average basis.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.037 lb/MMBtu of actual heat input*.</p> <p><u>When burning landfill gas:</u></p> <p>Particulate emissions (PE) shall not exceed 0.030 lb/MMBtu of actual heat input*.</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 0.030 lb/MMBtu of actual heat input*.</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.06 lb/MMBtu of actual heat input.</p> <p>Nitrogen Oxides (NO_x) emissions shall not exceed 0.20 lb/MMBtu of actual heat input, on a rolling 30-day average basis.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*.</p> <p>The particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3) when combusting No. 2 fuel oil is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with all applicable emission limitations (including any less stringent</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emission limitation) after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-31-05(D), 40 CFR Part 60 Subpart Db and 40 CFR Part 63, Subpart DDDDD.</p> <p>See c)(1) and c)(8).</p>
b.	<p>OAC rule 3745-31-05(D) Synthetic Minor to Avoid Nonattainment New Source Review and Prevention of Significant Deterioration</p>	<p>Particulate emissions (PE) shall not exceed 84.99 tons per year.**</p> <p>Particulate Matter less than 10 microns in diameter (PM₁₀) emissions shall not exceed 84.99 tons per year.**</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 1,733.59 tons per year.**</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 966.27 tons per year.**</p> <p>Carbon monoxide (CO) emissions shall not exceed 156.36 tons per year.**</p> <p>Volatile organic compound (VOC) emissions shall not exceed 57.55 tons per year.**</p> <p>Lead emissions shall not exceed 1.32 tons per year.**</p> <p>**as a rolling, 12-month summation from emissions units B027⁽¹⁾, B042, B043, B044, and B045, combined. ⁽¹⁾[B027 was permanently shut down by the permittee on August 14, 2013]</p> <p>See c)(2) through c)(7).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emission from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(C)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06(A)	This emissions unit is exempt from OAC rule 3745-18-06(D) and OAC rule 3745-18-37 during any calendar day in which natural gas is the only fuel burned.
g.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 lb/MMBtu of actual heat input and 5.32 tons per year.</p> <p>Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 ton per year.</p> <p>See b)(2)f.</p>
i.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)g.
j.	40 CFR Part 60, Subparts A and Db Standards of Performance (NSPS) for Industrial-Commercial-Institutional Steam Generating Units	<p>The nitrogen oxides (NO_x) emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.06 lb/MMBtu of actual heat input when firing No. 2 fuel oil or landfill gas.</p> <p>The particulate matter emission limitation specified by this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b. – b)(2)e. and c)(9).
k.	<p>40 CFR Part 63, Subpart DDDDD (40 CFR Part 63.7480-7575)</p> <p>National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters</p> <p>[In accordance with 40 CFR 63.7499 and 63.7575, this emissions unit is an existing boiler designed to burn liquid fuel (No. 2 fuel oil) or gas 1 fuel (natural gas, landfill gas). Therefore, the unit may be subject to the subcategory requirements for units designed to burn liquid fuel, units designed to burn light liquid fuel, and/or units designed to burn gas 1 fuel as defined in this subpart. The permittee shall comply with the emission limitations and operating limitations for the applicable fuel subcategory specified in this section.]</p>	<p>Applicable Emission Limits in Table 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63.</p> <p>Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 31, 2016, except as provided in 63.6(i).</p>
l.	40 CFR Part 63.1-15 (40 CFR 63.7565)	Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, the visible emission limitation and the use of low-NOx burners.
- b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.



- c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x and O₂ monitoring systems, designed to ensure continuous valid and representative readings of NO_x and O₂ emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x and O₂ monitoring systems must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.13, 40 CFR 60.48b(e), and 40 CFR Part 60, Appendix F]

- d. The continuous emission monitoring systems consist of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.2, and Appendix F to 40 CFR Part 60]

- e. Pursuant to 40 CFR 60.48b(l), the permittee is not required to operate a COMS on emissions unit B044 provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO₂ emissions rate no greater than 0.060 lb/MMBtu, and the unit operates according to the written site specific monitoring plan approved by the Southwest Ohio Air Quality Agency (SWOQA).

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

- g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC and lead emissions from this air contaminant source since the uncontrolled potential to emit for VOC's and lead is less than 10 tons/year.



This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas, No. 2 fuel oil or landfill gas in this emissions unit.

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

- (2) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[B * 5.7 \text{ lb/mm}^3\text{scf} + G_{B042} + G_{B043} + G_{B044} + G_{B045}]/2000 \text{ lbs/ton} \leq 156.36 \text{ tons of CO per 12-month rolling period}$$

Where:

B = landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and,

G_{B0XX} = CO emissions for B042, B043, B044, and B045 calculated based on the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) and the applicable emission factors for No. 2 fuel oil from AP- 42 Section 1.3 (9/98), (in pounds).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (3) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[A_{B045} * 100 \text{ lb/mm}^3\text{scf} + F * H * 0.07 \text{ lb/MMBtu} + G_{B042} + G_{B043} + G_{B044}]/2000 \text{ lbs/ton} \leq 966.27 \text{ tons of NO}_x \text{ per 12-month rolling period}$$

Where:

A_{B045} = natural gas usage in B045 for the 12-month period (in mmscf);

F = number 2 fuel oil usage in B045 for the 12-month period (in kgal);



G_{B0XX} = NO_x emissions for B042, B043, and B044 calculated based on data from NO_x CEMS for the 12-month period (in pounds); and,

H = heat content of No. 2 fuel oil in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shutdown by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (4) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+B) * 5.5 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * 0.25 \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 57.55 \text{ tons of VOC per 12-month rolling period}$$

Where:

A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);

B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and

F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (5) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:



$$[(A + B) * 0.60 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * (142 * S) \text{ lb/kgal}] / 2000 \text{ lbs/ton} \leq 1,733.59 \text{ tons of SO}_2 \text{ per 12-month rolling period}$$

Where:

- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf);
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- S = sulfur content of number 2 fuel oil (wt %).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (6) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[7.6 \text{ lbs/mmscf} * (A + B) + 2 \text{ lbs/kgal} * (F_{B045} + F_{B044} + F_{B043} + F_{B042})] / 2000 \text{ lbs/ton} \leq 84.99 \text{ tons of PE/PM}_{10} \text{ per 12-month rolling period}$$

Where:

- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.



⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (7) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A + B) * 5.00E-04 \text{ lb/mm}^3\text{scf} + F * H * 9.00E-06 \text{ lb/MMBtu}]/2000 \text{ lbs/ton} \leq 1.32 \text{ tons of lead per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf);
- F = total number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- H = heat content of number 2 fuel oil in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (8) The permittee shall install, operate, and maintain low-NOx burners, that comply with the NOx emission limitations listed in term b)(1), at all times when operating this emissions unit.

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



- (9) The quality of the No. 2 fuel oil and landfill gas burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.060 lb/MMBtu of actual heat input on an "as-received basis".

[Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]

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

63.7500, 63.7515(d), 63.7540, and Table 3 to Subpart DDDDD	annual tune-up requirements
63.7500 and Table 3 to Subpart DDDDD	one-time energy assessment requirements
63.7500(a)(3)	general duty to minimize emissions
63.7500 and Table 4 to Subpart DDDDD	requirements for fuel analysis, operating load based upon performance testing, and oxygen analyzer systems
63.7505	general compliance requirements

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, No. 2 fuel oil or landfill gas the permittee shall maintain a record of the type and quantity of fuel burned in emissions unit B044.

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

- (2) The permittee may use fuel analysis reports from the supplier to determine the heating value of natural gas and landfill gas along with the sulfur content of landfill gas [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. Each gas fuel batch is defined by the most recent analysis received from the supplier(s). These analyses must be obtained at least quarterly when burned [see 40 CFR 60.48b(j)(2) and 40 CFR 60.49b(r)].

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Db]

- (3) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's



analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu.) [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. The records shall also include certification from the fuel oil supplier that the oil meets the definition of very low sulfur distillate oil [see 40 CFR 60.49b(r)].

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Db]

- (4) The permittee shall maintain monthly records of the following for each fuel batch-firing scenario burned in emissions unit B044:
- a. the quantity of each fuel burned (standard cubic feet of natural gas and landfill gas, gallons of No. 2 fuel oil);
 - b. the heat content of each fuel (in Btu/mmscf for natural gas and landfill gas, and MMBtu/kgal for No. 2 fuel oil).;
 - c. the sulfur content of No. 2 fuel oil and landfill gas (weight% or gr/100 dscf); and
 - d. the SO₂ emissions from each fuel (lb/MMBtu) calculated based on the sulfur and heat content analyses in d)(2) and d)(3).

A fuel batch firing scenario is defined as a combination of fuels burned with specific characteristics determined by the fuel sampling results. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, and/or when there is a change in the fuel or combination of fuels burned in emissions unit B044.

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

- (5) The permittee shall collect and record the following information each month for emissions units B042, B043, B044, and B045 combined:
- a. the emissions of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead for each month, in tons; and
 - b. the updated rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead emissions, in tons. This shall include information for the current month and the preceding eleven calendar months.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (6) The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from emissions unit B044 in pounds per MMBtu. Such



continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall operate the continuous emissions monitoring system (CEMS) and record data during all periods of operation except for continuous monitoring systems breakdowns and repairs. Data shall be recorded during calibration checks, zero adjustments, and span adjustments.

The permittee shall operate the CEMS with a NO_x span value of 500 ppm as specified in 40 CFR 60.48b(e)(2)(i) or as determined in accordance with 40 CFR 60.48b(e)(2)(ii).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NO_x monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]

- (8) The permittee shall maintain records of the following data obtained by the NO_x CEMS for each operating day as specified in 40 CFR 60.49b(g):
- a. calendar date;
 - b. emissions of nitrogen oxides in pounds per MMBtu actual heat input on an hourly average basis;
 - c. emissions of nitrogen oxides in pounds per MMBtu actual heat input on a rolling, 30-day average basis;
 - d. identification of all days where the rolling, 30-day average NO_x emissions rate exceed the pound per MMBtu emission limitation, the reason for the excess emissions and a description of the corrective actions taken;
 - e. identification of operating days for which sufficient NO_x emissions data has not been obtained, the reason for not obtaining sufficient data, and a description of the corrective actions taken;
 - f. identification of all periods of time which emissions data has been excluded from the calculation of the average emission rate and the reason for excluding the data;
 - g. a records of the "F" factor used in the calculation of the rolling, 30-day average NO_x emission rate and the method used to determine the "F" factor;



- h. identification of the times when NO_x concentration exceeded the span of the continuous monitoring system;
- i. description of any modifications to the CEMS that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3 of 40 CFR Part 60, Appendix B;
- j. results of daily CEMS drift tests and quarterly accuracy assessments as required by Procedure 1 of 40 CFR Part 60, Appendix F; and
- k. results of daily zero/span calibration checks and magnitude of manual calibration adjustments.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (9) When NO_x emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emissions data by using standby monitoring systems, U.S. EPA Method 7 or 7a of 40 CFR Part 60, Appendix A, or other approved reference methods to provide data for a minimum of 75% of the operating hours in a day, in at least 22 out of 30 successive days of operation.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix F]

- (10) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendix B]

- (11) The permittee shall operate and maintain equipment to continuously monitor and record O₂ emitted from this emissions unit in percent O₂. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to:

- a. the percent O₂ with each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. results of quarterly cylinder gas audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);



- e. hours of operation of the emissions unit, continuous O₂ monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous O₂ monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O₂ monitoring system; as well as,
- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, 40 CFR 60.13, and 40 CFR Part 60, Appendices B and F]

- (12) The permittee shall maintain all of the records specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

[Authority for term: OAC rules 3745-31-05, 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (13) This emissions unit shall be operated and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain records verifying that necessary maintenance activities have been performed on this emissions unit.

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

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

63.7525	monitoring, installation, operating, and maintenance requirements
63.7535, 63.7540, and Table 8 to Subpart DDDDD	requirements for monitoring data and continuous compliance demonstration
63.7555	required overall records to be maintained
63.7560	record format and retention requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and



record keeping requirements contained in Permit to Install #P0109124, issued on 7/17/2013:d)(1) through d)(14). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the calculated sulfur dioxide emission rates from d)(2) and d)(3) above. The notification shall include a copy of such record and shall be sent to the within 45 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports to the Southwest Ohio Air Quality Agency which identify all exceedances of the rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC, and lead emissions for each calendar month for emissions units B042, B043, B044, and B045 combined.

The quarterly 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 rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (3) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any fuel burned in this emissions unit other than natural gas, No. 2 fuel oil or landfill gas. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

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

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Southwest Ohio Air Quality Agency documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).



- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
 - ii. the manufacturer and model number of the continuous NO_x and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total NO_x emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;
 - viii. results and dates of quarterly cylinder gas audits;
 - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
 - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;
 - xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;
 - xii. the date, time, and duration of any downtime** of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and
 - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter, and shall contain the information specified in d)(8).

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report



** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O₂ monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O₂ monitoring system downtime and malfunction while the emissions unit was on line.
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous O₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the total operating time (hours) of the emissions unit;
 - v. the total operating time of the continuous O₂ monitoring system while the emissions unit was in operation;
 - vi. results and dates of quarterly cylinder gas audits;
 - vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
 - viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O₂ monitor out-of-control and the compliant results following any corrective actions;
 - ix. the date, time, and duration of any/each malfunction* of the continuous O₂ monitoring system while the emissions unit was in operation;
 - x. the date, time, and duration of any downtime* of the continuous O₂ monitoring system while the emissions unit was in operation; and



- xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart Db, and 40 CFR 60.7]

- (6) The permittee shall submit quarterly reports as specified in the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l). These reports shall be submitted as specified under 40 CFR Part 60.49b(h).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

- (7) The permittee shall submit annual reports which specify the total PE, PM₁₀, SO₂, NO_x, VOC, CO and lead emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

- (8) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, in addition to e)(4)-e)(6) above, including the following sections:

60.49b(a)	initial notification requirements
60.49b(b)	initial performance test data

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Db]



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

63.7530(d)-(g) and 63.7545	Notification of Compliance Status requirements
63.7550 and Table 9 to Subpart DDDDD	content and submission of compliance reports

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (10) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0109124, issued on 7/17/2013: e)(1) – e)(9). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

When burning natural gas, this emissions unit shall not exceed:

0.0075 pound of PE/MMBtu;

0.0075 pound of PM₁₀/MMBtu;

0.0006 pound of SO₂/MMBtu; and

0.082 pound of CO/MMBtu.

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.015 pound of PE/MMBtu;

0.015 pound of PM₁₀/MMBtu; and

0.037 pound of CO/MMBtu.

When burning landfill gas, this emissions unit shall not exceed:

0.082 pound of CO/MMBtu



Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by multiplying the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) by 1 ft³/1020 Btu and the applicable emission factors for No. 2 fuel oil from AP-42 Section 1.3 (5/10) by 1000 gal/140 MMBtu. The CO emission factor for natural gas was assumed to be equivalent to landfill gas.

If required, the permittee shall demonstrate compliance with the PE, PM₁₀, SO₂ (natural gas) and CO lb/MMBtu emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, 6, 10, 25 and 201.

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

b. Emission Limitations:

0.10 pound of NO_x/MMBtu, when burning natural gas, on a rolling 30-day average basis; and

0.10 pound of NO_x/MMBtu, when burning No. 2 fuel oil, on a rolling 30-day average.

0.20 pound of NO_x/MMBtu, when burning landfill gas, on a rolling 30-day average.

Applicable Compliance Method:

Ongoing compliance with the NO_x emission limitations contained in this permit, including 40 CFR Part 60, Subpart Db, shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

c. Emission Limitation:

When burning No.2 fuel oil or landfill gas this emissions unit shall not exceed: 0.06 pound of SO₂/MMBtu of actual heat input.

Applicable Compliance Method:

For fuel oil: $ER = (1 \times 10^6)/H \times D \times S \times 1.974$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the liquid fuel in Btu per gallon;



D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

For landfill gas: $ER = (1 \times 10^6)/H \times D \times S \times 1.998$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the gaseous fuel in Btu per standard cubic foot;

D = the density of the gaseous fuel in pounds per standard cubic foot; and

S = the decimal fraction of sulfur in the gaseous fuel.

Compliance with the lb/MMBtu emission limitations shall be based upon the record keeping requirements in d)(2) - d)(4).

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

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

d. Emission Limitation:

Visible particulate emission from the emissions unit B044 stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

When combusting No. 2 fuel oil, compliance may be demonstrated in accordance with the Emery Site Specific Monitoring Plan, dated November 20, 2012, submitted pursuant to 40 CFR Part 60.48b(l).

When combusting gaseous fuels, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1). No visible emissions observations are specifically required to demonstrate compliance with this emission limitation when combusting gaseous fuels but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-17-07(A)(1), and 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Db]

e. Emission Limitations:

VOC emissions shall not exceed 0.0054 lb/MMBtu and 5.32 TPY.

Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 TPY.



Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by using the applicable VOC and lead emission factors from AP-42 for the worst case fuel burned in this emissions unit.

The annual emission limitations are determined by multiplying the lb/MMBtu emission limitation by the MMBtu/hr rating of the emissions unit then multiplying by 8760 hours/year then divide by 2000.

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

f. Emission Limitations:

The combined emissions from emissions units B042, B043, B044, and B045 shall not exceed 84.99 tons per year of PE, 84.99 tons per year of PM₁₀, 1,733.59 tons per year of SO₂, 966.27 tons per year of NO_x, 156.36 tons per year of CO, 57.55 tons per year of VOC and 1.32 tons per year of lead, on a rolling, 12-month summation of the emissions.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping in d)(5).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

g. Emission Limitations:

Particulate emissions shall not exceed 0.030 pound per MMBtu of actual heat input when burning landfill gas.

PM₁₀ emissions shall not exceed 0.030 pound per MMBtu of actual heat input when burning landfill gas.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the lb/MMBtu PE and PM₁₀ emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, and 201.

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

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

63.7510, 63.7530, and Tables 5, 6, and 7 of Subpart DDDDD	initial compliance requirements
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63.7515	requirements for subsequent performance tests, fuel analyses, and tune-ups
63.7520, 63.7521 and Tables 5 and 6 to Subpart DDDDD	stack test and fuel analysis procedures
63.7540 and Table 8 to Subpart DDDDD	continuous compliance requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0109124, issued on 7/17/2013: f)(1) - f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



4. B045, Boiler No. 10

Operations, Property and/or Equipment Description:

Boiler #10 - 75 MMBtu/hr boiler fired with natural gas or No. 2 fuel oil

- 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) Best Available Technology (BAT) [PTI P0109124, issued July 17, 2013]	The following emission limitations shall not be exceeded: <u>When burning natural gas:</u> Sulfur Dioxide (SO ₂) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input*. Nitrogen Oxides (NO _x) emissions shall not exceed 0.07 lb/MMBtu of actual heat input. Carbon Monoxide (CO) emissions shall not exceed 0.082 lb/MMBtu of actual heat input*. <u>When burning No.2 fuel oil:</u> Nitrogen Oxides (NO _x) emissions shall not exceed 0.07 lb/MMBtu of actual heat input. Carbon Monoxide (CO) emissions shall not exceed 0.037 lb/MMBtu of actual heat input*. The particulate emission limitation established pursuant to OAC rule 3745-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>31-05(A)(3) when combusting No. 2 fuel oil is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation) after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p> <p>*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-31-05(D), OAC rule 3745-17-10(B), 40 CFR Part 60 Subpart Dc, and 40 CFR Part 63, Subpart DDDDD.</p> <p>See c)(1) and c)(8).</p>
b.	<p>OAC rule 3745-31-05(D) Synthetic Minor to Avoid Nonattainment New Source Review and Prevention of Significant Deterioration</p>	<p>Particulate emissions (PE) shall not exceed 84.99 tons per year.**</p> <p>Particulate matter emissions 10 microns and less in diameter (PM₁₀) shall not exceed 84.99 tons per year.**</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 1,733.59 tons per year.**</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 966.27 tons per year.**</p> <p>Carbon monoxide (CO) emissions shall not exceed 156.36 tons per year.**</p> <p>Volatile organic compound (VOC) emissions shall not exceed 57.55 tons per year.**</p> <p>Lead emissions shall not exceed 1.32 tons per year.**</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>**as a rolling, 12-month summation from emissions units B027⁽¹⁾, B042, B043, B044, and B045, combined. ⁽¹⁾[B027 was permanently shut down by the permittee on August 14, 2013]</p> <p>See c)(2) through c)(7).</p>
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emission from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)(1)	The particulate emissions (PE) shall not exceed 0.020 pound of particulate emissions per million Btu of actual heat input.
e.	OAC rule 3745-18-06(A)	This emissions unit is exempt from OAC rule 3745-18-06(D) and OAC rule 3745-18-37 during any calendar day in which natural gas is the only fuel burned.
f.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM₁₀) shall not exceed 0.020 lb/MMBtu of actual heat input and 6.57 tons per year.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.0054 lb/MMBtu of actual heat input and 1.77 tons per year.</p> <p>Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.00296 ton per year.</p> <p>See b)(2)e.</p>
h.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)f.
i.	<p>40 CFR Part 60, Subparts A and Dc (40 CFR 60.40c-60.48c)</p> <p>Standards of Performance (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units</p>	<p>Sulfur Dioxide (SO₂) emissions shall not exceed 0.06 lb/MMBtu of actual heat input, when firing No. 2 fuel oil.</p> <p>Visible particulate emission shall not exceed 20 percent opacity, as a six-</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>minute average, except for one 6-minute period per hour of not more than 27 percent opacity, when firing No. 2 fuel oil.</p> <p>The particulate matter emission limitation specified by this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-17-10.</p> <p>See b)(2)b. - b)(2)d.</p>
j.	<p>40 CFR Part 63, Subpart DDDDD (40 CFR Part 63.7480-7575)</p> <p>National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters.</p> <p>[In accordance with 40 CFR 63.7499 and 63.7575, this emissions unit is an existing boiler designed to burn liquid fuel (No. 2 fuel oil) or gas 1 fuel (natural gas). Therefore, the unit may be subject to the subcategory requirements for units designed to burn liquid fuel, units designed to burn light liquid fuel, and/or units designed to burn gas 1 fuel as defined in this subpart. The permittee shall comply with the emission limitations and operating limitations for the applicable fuel subcategory specified in this section.]</p>	<p>Applicable Emission Limits in Table 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63.</p> <p>Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 31, 2016, except as provided in 63.6(i).</p>
k.	<p>40 CFR Part 63.1-15 (40 CFR 63.7565)</p>	<p>Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.</p>



(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, the visible emissions limitation, the use of natural gas and/or very low sulfur No. 2 fuel oil, and the use of low-NOx burners.
- b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- c. Pursuant to 40 CFR 60.47c(c), emissions unit B045 is not subject to the particulate matter (PM) emissions limitations and monitoring requirements of 40 CFR 60.43c when firing liquid or gaseous fuels with potential sulfur dioxide emission rate of 0.06 lb/MMBtu heat input or less without using a post-combustion control technology.
- d. Pursuant to 40 CFR 60.43c(d), the opacity standards under Subpart Dc apply at all times, except during periods of startup, shutdown, or malfunction.
- e. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- f. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limitation of 0.020 pound of particulate emissions per million Btu of actual heat input under OAC rule 3745-17-10(B)(1). Additionally, the Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, PM₁₀ and lead emissions from this air contaminant source since the uncontrolled potential to emit for VOC's and PM₁₀ is less than 10 tons/year.

This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.



c) Operational Restrictions

- (1) The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.

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

- (2) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[B * 5.7 \text{ lb/mm}^3\text{scf} + G_{B042} + G_{B043} + G_{B044} + G_{B045}]/2000 \text{ lbs/ton} \leq 156.36 \text{ tons of CO per 12-month rolling period}$$

Where:

B = landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and,

G_{B0XX} = CO emissions for B042, B043, B044 and B045 calculated based on the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) and the applicable emission factors for No. 2 fuel oil from AP- 42 Section 1.3 (9/98), (in pounds).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (3) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[A_{B045} * 100 \text{ lb/mm}^3\text{scf} + F * H * 0.07 \text{ lb/MMBtu} + G_{B042} + G_{B043} + G_{B044}]/2000 \text{ lbs/ton} \leq 966.27 \text{ tons of NO}_x \text{ per 12-month rolling period}$$

Where:

A_{B045} = natural gas usage in B045 for the 12-month period (in mmscf);

F = number 2 fuel oil usage in B045 for the 12-month period (in kgal);

G_{B0XX} = NO_x emissions for B042, B043, and B044 calculated based on data from NO_x CEMS for the 12-month period (in pounds); and,

H = heat content of No. 2 fuel oil in MMBtu/kgal.



The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shutdown by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (4) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+B) * 5.5 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * 0.25 \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 57.55 \text{ tons of VOC per 12-month rolling period}$$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf); and
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (5) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[(A+ B) * 0.60 \text{ lb/mmscf} + (F_{B042} + F_{B043} + F_{B044} + F_{B045}) * (142 * S) \text{ lb/kgal}]/2000 \text{ lbs/ton} \leq 1,733.59 \text{ tons of SO}_2 \text{ per 12-month rolling period}$$

Where:



- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf);
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- S = sulfur content of number 2 fuel oil (wt %).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (6) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$$[7.6 \text{ lbs/mmscf} * (A + B) + 2 \text{ lbs/kgal} * (F_{B045} + F_{B044} + F_{B043} + F_{B042})] / 2000 \text{ lbs/ton} \leq 84.99 \text{ tons of PE/PM}_{10} \text{ per 12-month rolling period}$$

Where:

- A_{B0XX} = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042 and B044 for the 12-month period (in mmscf); and
- F_{B0XX} = number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal).

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.



[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (7) The total fuel usage in emissions units B042, B043, B044, and B045 is restricted by the following formula⁽¹⁾:

$[(A + B) * 5.00E-04 \text{ lb/mmscf} + F * H * 9.00E-06 \text{ lb/MMBtu}] / 2000 \text{ lbs/ton} \leq 1.32 \text{ tons of lead per 12-month rolling period}$

Where:

- A = total natural gas usage in B042, B043, B044, and B045 for the 12-month period (in mmscf);
- B = total landfill gas usage in B042, and B044 for the 12-month period (in mmscf);
- F = total number 2 fuel oil usage in B042, B043, B044, and B045 for the 12-month period (in kgal); and,
- H = heat content of number 2 fuel oil in MMBtu/kgal.

The permittee shall maintain monthly records of the 12-month summation of the fuel usage rates.

The permittee has existing records to generate the rolling, 12-month summation of the fuel usage rate, upon issuance of this permit.

⁽¹⁾This term and condition as contained in PTI P0109124, issued 7/17/2013, included requirements and restrictions for emissions unit B027; however emissions unit B027 was permanently shut down by the permittee on August 14, 2013. Therefore, references to emissions unit B027 have been removed from this term and condition for the purposes of this Title V operating permit.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(A)(1)]

- (8) The permittee shall install, operate, and maintain low-NOx burners, that comply with the NOx emission limitations listed in term b)(1), at all times when operating this emissions unit.

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

- (9) The quality of the No. 2 fuel oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.060 lb/MMBtu of actual heat input on an "as-received basis".

[Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 60, Subpart Dc]

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



63.7500, 63.7515(d), 63.7540, and Table 3 to Subpart DDDDD	annual tune-up requirements
63.7500 and Table 3 to Subpart DDDDD	one-time energy assessment requirements
63.7500(a)(3)	general duty to minimize emissions
63.7500 and Table 4 to Subpart DDDDD	requirements for fuel analysis, operating load based upon performance testing, and oxygen analyzer systems
63.7505	general compliance requirements

[Authority for term: OAC rule 3745-77-07(A)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas and/or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in emissions unit B045.

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

- (2) The permittee may use fuel analysis reports from the supplier to determine the heating value of natural gas. Each natural gas fuel batch is defined by the most recent analysis received from the supplier(s). These analyses must be obtained at least once every quarter.

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

- (3) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu.) [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. The records shall also include certification from the fuel oil supplier that the oil meets the definition of very low sulfur distillate oil. [see 60.48c(f)]

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content



and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Dc]

- (4) The permittee shall maintain monthly records of the following:
 - a. the quantity of each fuel burned (standard cubic feet of natural gas, gallons of no. 2 fuel oil);
 - b. the heat content of each fuel (Btu per standard cubic feet, Btu per gallon);
 - c. the sulfur content of fuel oil(weight%); and
 - d. the SO₂ emissions from each fuel (lb/MMBtu) calculated based on the sulfur and heat content analyses in sections d)(2) and d)(3).

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

- (5) The permittee shall collect and record the following information each month for emissions units B042, B043, B044, and B045 combined:
 - a. the emissions of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead for each month, in tons; and
 - b. the updated rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC and lead emissions, in tons. This shall include information for the current month and the preceding eleven calendar months.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (6) This emissions unit shall be operated and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain records verifying that necessary maintenance activities have been performed on this emissions unit.

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

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

63.7525	monitoring, installation, operating, and maintenance requirements
63.7535, 63.7540, and Table 8 to Subpart DDDDD	requirements for monitoring data and continuous compliance demonstration



63.7555	required overall records to be maintained
63.7560	record format and retention requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (8) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0109124, issued on 7/17/2013:d)(1) through d)(7). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the calculated sulfur dioxide emission rates from d)(2) and d)(3) above. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports to the Southwest Ohio Air Quality Agency which identify all exceedances of the rolling, 12-month summation of PE, PM₁₀, SO₂, NO_x, CO, VOC, and lead emissions for each calendar month for emissions units B042, B043, B044, and B045 combined.

The quarterly 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 rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

- (3) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality

Agency within 45 days after the deviation occurs.

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



- (4) The permittee shall submit annual reports which specify the total PE, PM₁₀, SO₂, NO_x, VOC, CO and lead emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

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

63.7530(d)-(g) and 63.7545	Notification of Compliance Status requirements
63.7550 and Table 9 to Subpart DDDDD	content and submission of compliance reports

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0109124, issued on 7/17/2013: e)(1) – e)(5). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

When burning natural gas, this emissions unit shall not exceed:

0.0006 pound of SO₂/MMBtu; and

0.082 pound of CO/MMBtu.

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.037 pound of CO/MMBtu.

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by multiplying the applicable emission factors for natural gas from AP-42, Section 1.4 (7/98) by 1 ft³/1020 Btu and the



applicable emission factors for No. 2 fuel oil from AP-42 Section 1.3 (5/10) by 1000 gal/140 MMBtu.

If required, the permittee shall demonstrate compliance with the SO₂ (natural gas) and CO lb/MMBtu emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 6 and 10.

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

b. Emission Limitation:

0.07 pound of NO_x/MMBtu, when burning natural gas or No. 2 fuel oil.

Applicable Compliance Method:

The pound/MMBtu limitation specified above is based upon the emissions unit's potential to emit which is based on the manufacturer's guaranteed NO_x emission rate.

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

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

c. Emission Limitation:

When burning No.2 fuel oil, this emissions unit shall not exceed:

0.06 pound of SO₂/MMBtu of actual heat input.

Applicable Compliance Method:

For fuel oil: $ER = (1 \times 10^6) / H \times D \times S \times 1.974$ where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

Compliance with the lb/MMBtu emission limitations shall be based upon the record keeping requirements in d)(3) and d)(4).

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

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-77-07(C)(1), and 40 CFR Part 60 Subpart Dc]



d. Emission Limitations:

Visible particulate emission from the emissions unit B045 stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Visible particulate emission shall not exceed 20 percent opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27 percent opacity, when firing No. 2 fuel oil.

Applicable compliance method:

When combusting gaseous fuels, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1). No visible emissions observations are specifically required to demonstrate compliance with this emission limitation when combusting gaseous fuels but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

When combusting No. 2 fuel oil, compliance with the visible particulate emissions limitation shall be determined in accordance with the requirements of 40 CFR 60.45c and 60.47c.

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-17-07(A)(1), 3745-77-07(C)(1), and 40 CFR Part 60, Subpart Dc]

e. Emission Limitations:

PE/PM₁₀ emissions shall not exceed 0.020 lb/MMBtu and 6.57 TPY.

VOC emissions shall not exceed 0.0054 lb/MMBtu and 5.32 TPY when burning natural gas.

Lead emissions shall not exceed 0.000009 lb/MMBtu and 0.0089 TPY when burning No. 2 fuel oil.

Applicable Compliance Method:

The pound/MMBtu limitations specified above are based upon the emissions unit's potential to emit and are determined by using the applicable PE/PM₁₀, VOC and lead emission factors from AP-42 for the worst case fuel burned in this emissions unit.

The annual emission limitations are determined by multiplying the lb/MMBtu emission limitation by the MMBtu/hr rating of the emissions unit then multiplying by 8760 hours/year then divide by 2000.

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

f. Emission Limitations:



The combined emissions from emissions units B042, B043, B044, and B045 shall not exceed 84.99 tons per year of PE, 84.99 tons per year of PM₁₀, 1,733.59 tons per year of SO₂, 966.27 tons per year of NO_x, 156.36 tons per year of CO, 57.55 tons per year of VOC and 1.32 tons per year of lead, on a rolling, 12-month summation of the emissions.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping in d)(5).

[Authority for term: OAC rules 3745-31-05(A)(3), 3745-31-05(D), and 3745-77-07(C)(1)]

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

63.7510, 63.7530, and Tables 5, 6, and 7 of Subpart DDDDD	initial compliance requirements
63.7515	requirements for subsequent performance tests, fuel analyses, and tune-ups
63.7520, 63.7521 and Tables 5 and 6 to Subpart DDDDD	stack test and fuel analysis procedures
63.7540 and Table 8 to Subpart DDDDD	continuous compliance requirements

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63, Subpart DDDDD]

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0109124, issued on 7/17/2013: f)(1) - f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



5. P004, HIGH PRESSURE SPLITTERS, HPS-2 through HPS-6 (5)

Operations, Property and/or Equipment Description:

High pressure hydrolysis of glycerides to produce fatty acids and aqueous glycerine.

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 3745-21-07(M)	See b)(2)a.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-21-07(M) are not applicable because there is no control device for this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.



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g) Miscellaneous Requirements

(1) None.



6. P010, OZONOLYSIS PROCESS II

Operations, Property and/or Equipment Description:

Ozone oxidation of fatty acids to produce pelargonic and azelaic acid products.

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) Best Available Technology (BAT) [PTI P0105593, issued December 3, 2009]	The organic compound (OC) emissions shall not exceed 2.59 pounds per hour and 11.34 tons per year. See b)(2)b.
b.	OAC rule 3745-21-13(F)(1)(d)	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
c.	OAC rule 3745-21-16(C)	Exempt. See b)(2)c. and d)(4).
d.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) accordance with 40 CFR 63.2435 (a), this emissions unit contains Group 1 continuous process vents and is subject to the emission limitations/control measures specified in 40 CFR 63.2455.]	See b)(2)d., c)(1), and c)(2). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475). See Section B.7. of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		CFR Part 63 Subpart FFFF(40 CFR 63.2480).
e.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a regenerative thermal oxidizer (RTO) to control OC emissions and compliance with the hourly and annual OC emission limitation.
- b. All of the VOC emissions from this emissions unit shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- c. This emissions unit does not currently contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).
- d. In accordance with 40 CFR 63.2455(a), the permittee shall reduce total hazardous air pollutant (HAP) emissions by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppmv as organic HAP or total organic compound (TOC) by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable equipment and operating requirements in 63.988(a).

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.2450]

- (2) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.2450]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average



temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

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

- (2) The permittee shall properly operate and maintain continuous temperature monitors and recorder(s) that measure and record(s) the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature on continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than 3 years.

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

- (3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and



k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

(4) The permittee shall maintain records to demonstrate that this emissions unit does not contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-21-16(H)(1)]

(5) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable monitoring and recordkeeping requirements of 40 CFR 63.988(c) and 40 CFR 63.998(a) through 40 CFR 63.998(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(e)(1)]

(6) The permittee shall maintain each applicable record as specified in 40 CFR 63.2525(a).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(a)]

(7) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(b)]

(8) In accordance with 40 CFR 63.2525(f) through (h), the permittee shall maintain the following records:

- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
- b. Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).
- c. For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(f) through (h)]



- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0105593, issued on 12/3/2009:d)(1) through d)(8). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly summaries of the following records:
- a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
 - b. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - c. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly 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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3)]

- (2) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c), the permittee shall comply with the applicable reporting requirements of 40 CFR 63.999(a) through (d).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(e)(1)]

- (3) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.7. of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2520(b) and (e)]



- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0105593, issued on 12/3/2009: e)(1) – e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission limitations:

The organic compound (OC) emissions shall not exceed 2.59 pounds per hour and 11.34 tons per year.

Applicable compliance method:

Compliance with the short term emission rate shall be demonstrated by the emission testing requirements in f)(2). The mass rate of emissions shall be determined using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Compliance with the tons per year limitation shall be demonstrated by multiplying the hourly emission rate times 8760 hours per year and dividing by 2000 pounds per ton.

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

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

a. The emission testing shall be conducted approximately 2.5 years following the effective date of this Title V permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for organic compounds.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate and control efficiencies for organic compounds:

The mass rate of emissions shall be determined using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the



tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

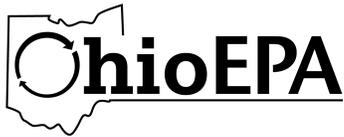
- (3) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the applicable performance testing requirements of 40 CFR 63.982(c)(2), including 63.997(a) through 40 CFR 63.997(e).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450]

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0105593, issued on 12/3/2009: f)(1) - f)(3). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



7. P017, OZONOLYSIS PROCESS III

Operations, Property and/or Equipment Description:

Ozone oxidation of fatty acids to produce pelargonic and azelaic acid products.

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) Best Available Technology (BAT) [PTI P0105593, issued December 3, 2009]	The organic compound (OC) emissions shall not exceed 2.54 pounds per hour and 11.13 tons per year. See b)(2)b.
b.	OAC rule 3745-21-13(F)(1)(d)	The emission limitation(s) and control measure(s) specified in this rule are less stringent than the emission limitation(s) and control measure(s) established in 40 CFR Part 63, Subpart FFFF.
c.	OAC rule 3745-21-16(C)	Exempt. See b)(2)c. and d)(4).
d.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) accordance with 40 CFR 63.2435 (a), this emissions unit contains Group 1 continuous process vents and is subject to the emission limitations/control measures specified in 40 CFR 63.2455.]	See b)(2)d., c)(1), and c)(2). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475). See Section B.7. of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		CFR Part 63 Subpart FFFF(40 CFR 63.2480).
e.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a regenerative thermal oxidizer (RTO) to control OC emissions and compliance with the hourly and annual OC emissions limits.
- b. All of the VOC emissions from this emissions unit shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- c. This emissions unit does not currently contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).
- d. In accordance with 40 CFR 63.2455(a), the permittee shall reduce total hazardous air pollutant (HAP) emissions by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppmv as organic HAP or total organic compound (TOC) by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable equipment and operating requirements in 63.988(a).

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.2450]

- (2) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.2450]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average



temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

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

- (2) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature on continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than 3 years.

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

- (3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and



k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

(4) The permittee shall maintain records to demonstrate that this emissions unit does not contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-21-16(H)(1)]

(5) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable monitoring and recordkeeping requirements of 40 CFR 63.988(c) and 40 CFR 63.998(a) through 40 CFR 63.998(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450]

(6) The permittee shall maintain each applicable record as specified in 40 CFR 63.2525(a).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(a)]

(7) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(b)]

(8) In accordance with 40 CFR 63.2525(f) through (h), the permittee shall maintain the following records:

- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
- b. Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).
- c. For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(f) through (h)]



- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0105593, issued on 12/3/2009:d)(1) through d)(8). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly summaries of the following records:
- b. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
 - a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;
 - b. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - c. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly 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 rules 3745-77-07(C)(1) and 3745-31-05(A)(3)]

- (2) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c), the permittee shall comply with the applicable reporting requirements of 40 CFR 63.999(a) through (d).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(e)(1)]

- (3) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.7. of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2520(b) and (e)]



- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0105593, issued on 12/3/2009: e)(1) – e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission limitations:

The organic compound (OC) emissions shall not exceed 2.59 pounds per hour and 11.34 tons per year.

Applicable compliance method:

Compliance with the short term emission rate shall be demonstrated by the emission testing requirements in f)(2). The mass rate of emissions shall be determined using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Compliance with the tons per year limitation shall be demonstrated by multiplying the hourly emission rate times 8760 hours per year and dividing by 2000 pounds per ton.

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

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

a. The emission testing shall be conducted approximately 2.5 years following the effective date of this Title V permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for organic compounds.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate and control efficiencies for organic compounds:

The mass rate of emissions shall be determined using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the



tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

- (3) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the applicable performance testing requirements of 40 CFR 63.982(c)(2), including 40 CFR 63.997(a) through 40 CFR 63.997(e).

[Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR 63.2450]

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0105593, issued on 12/3/2009: f)(1) - f)(3). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



8. P019, HIGH PRESSURE SPLITTER HPS-7

Operations, Property and/or Equipment Description:

High pressure hydrolysis of glycerides to produce fatty acids and aqueous glycerine.

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 #14-319, issued October 10, 1980]	See b)(2)a.
b.	OAC rule 3745-21-07(M)	See b)(2)b.

(2) Additional Terms and Conditions

a. No applicable emission limitations or control measures were established for this emissions unit in PTI 14-319.

b. The requirements of OAC rule 3745-21-07(M) are not applicable because there is no control device for this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.



f) Testing Requirements

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

a. None.

g) Miscellaneous Requirements

(1) None.



9. P048, SOLVENT SEPARATION PLANT E

Operations, Property and/or Equipment Description:

Fractional crystallization to separate fatty acid mixtures.

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) Best Available Technology (BAT) [PTI #14-1296, issued January 6, 1988]	Volatile organic compound (VOC) emissions shall not exceed 1.19 pounds per hour*. *The requirements of this rule are less stringent than the requirements of 40 CFR Part 63, Subpart FFFF. The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation). See b)(2)a.
b.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) accordance with 40 CFR 63.2435 (a), this emissions unit contains Group 1 continuous process vents and is subject to the emission limitations/control measures specified in 40 CFR 63.2455.]	See b)(2)b. and c)(1). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475). See Section B.7. of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		CFR Part 63 Subpart FFFF(40 CFR 63.2480).
c.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a process vent scrubber.
- b. In accordance with 40 CFR 63.2455(a), the permittee shall reduce total hazardous air pollutant (HAP) emissions by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppmv as organic HAP or total organic compound (TOC) by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.2450(e)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) In accordance with 40 CFR 63.2450(e)(1) and 63.982(c), the permittee shall comply with the applicable monitoring and recordkeeping requirements of 40 CFR 63.998(b).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63.2450]

- (2) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:
 - a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow(make-up water);
 - b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D); and
 - c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(k)(5)]



- (3) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(b)]

- (4) In accordance with 40 CFR 63.2525(f) through (h), the permittee shall maintain the following records:

- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
- b. Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).
- c. For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(f) through (h)]

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-1296, issued on 1/6/1988:d)(1) through d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.7. of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2520(b) and (e)]

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #14-1296, issued on 1/6/1988: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

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:

Volatile organic compound (VOC) emissions shall not exceed 1.19 pounds per hour.

Applicable Compliance Method:

Compliance with the short term emission rate shall be demonstrated by the emission testing requirements in f)(2).
- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable performance testing requirements of 40 CFR 63.997.
 - b. Emission testing shall be conducted within 6 months following the effective date of this Title V permit.
 - c. The emission testing shall be conducted to demonstrate compliance with the HAP emission limitation/control requirements specified in b)(2)b.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60 Appendix A, Methods 1-4, and 18.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - e. During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.
 - f. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
 - g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be



conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 40 CFR Part 63, Subpart FFFF]

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #14-1296, issued on 1/6/1988: f(1) - f(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



10. P053, SOLVENT SEPARATION PLANT D

Operations, Property and/or Equipment Description:

Fractional crystallization to separate fatty acid mixtures.

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.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) accordance with 40 CFR 63.2435 (a), this emissions unit contains Group 1 continuous process vents and is subject to the emission limitations/control measures specified in 40 CFR 63.2455.]	See b)(2)a. and c)(1). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for Waste Water provisions of 40 CFR Part 63 Subpart FFFF (40 CFR 63.2485). See Section B.7. of the Facility-Wide Terms and Conditions for the non-applicability determination for the Transfer Rack provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2475). See Section B.7. of the Facility-Wide Terms and Conditions for the Leak Detection and Repair provisions of 40 CFR Part 63 Subpart FFFF(40 CFR 63.2480).
b.	40 CFR 63.1-15 (40 CFR 63.2540)	Table 12 to Subpart FFFF of 40 CFR Part 63 – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 applies.



(2) Additional Terms and Conditions

- a. In accordance with 40 CFR 63.2455(a), the permittee shall reduce total hazardous air pollutant (HAP) emissions by ≥ 98 percent by weight or to an outlet process concentration ≤ 20 ppmv as organic HAP or total organic compound (TOC) by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare).

c) Operational Restrictions

- (1) In accordance with 40 CFR 63.2450(e)(1), the permittee shall comply with the requirements of 40 CFR 63.982(c) for the closed vent system.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(e)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the applicable monitoring and recordkeeping requirements of 40 CFR 63.998(b).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450]

- (2) In accordance with 40 CFR Part 63.2450(k)(5), the permittee shall conduct the following monitoring and recordkeeping for the scrubber liquid:

- a. Use a flow meter capable of providing a continuous record of the absorber influent liquid flow (make-up water);
- b. Determine gas stream flow using one of the procedures specified in 40 CFR 63.994(c)(1)(ii)(A) through (D); and
- c. Record the absorber liquid-to-gas ratio averaged over the time period of the most recent performance test that demonstrated compliance.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2450(k)(5)]

- (3) The permittee shall maintain records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(b)]

- (4) In accordance with 40 CFR 63.2525(f) through (h), the permittee shall maintain the following records:

- a. A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
- b. Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).



- c. For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2525(f) through (h)]

e) Reporting Requirements

- (1) The permittee shall submit semiannual reports in accordance with 40 CFR 63.2520(b) which contain the information specified in 40 CFR 63.2520(e). See Section B.7. of the Facility Wide Terms and Conditions for the specifics of the semiannual reporting requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.2520(b) and (e)]

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

- i. In accordance with 40 CFR 63.2450(e)(1) and 63.982(c)(2), the permittee shall comply with the applicable performance testing requirements of 40 CFR 63.997.
- ii. Emission testing shall be conducted within 6 months following the effective date of this Title V permit.
- iii. The emission testing shall be conducted to demonstrate compliance with the HAP emission limitation/control requirements specified in b)(2)a.
- iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

40 CFR Part 60 Appendix A, Methods 1-4, and 18.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- v. During the stack test, the make-up water flow rate and the absorber liquid-to-gas ratio shall be recorded every fifteen minutes. These fifteen minute data points shall be used to determine the average make-up water and absorber liquid-to-gas ratios.
- vi. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local



air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

- vii. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- viii. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
- ix. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

[Authority for term: OAC rules 3745-77-07(C)(1) and 40 CFR Part 63, Subpart FFFF]

g) Miscellaneous Requirements

- (1) None.



11. P101, COOLING TOWER E-2, BUILDING 11

Operations, Property and/or Equipment Description:

E-2 cooling tower servicing direct-contact heat exchangers in stillhouse.

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 3745-21-07(M)	See b)(2)a.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-21-07(M) are not applicable because there is no control device for this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.



g) Miscellaneous Requirements

- (1) None.



12. P102, WASTEWATER TREATMENT

Operations, Property and/or Equipment Description:

Primary treatment of plant effluent before discharge to POTW.

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 3745-21-07(M)	See b)(2)a.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-21-07(M) are not applicable because there is no control device for this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.



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g) Miscellaneous Requirements

(1) None.



13. P103, Bldg 11 East Barometric Cooling Tower

Operations, Property and/or Equipment Description:

Bldg 11 East Barometric Cooling Tower

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) Best Available Technology (BAT) [PTI P0106056, issued March 29, 2010]	Volatile organic compound (VOC) emissions shall not exceed 10.14 pounds per hour and 35.9 tons per year.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) and particulate matter emissions 10 microns or less in diameter (PM ₁₀) shall not exceed 0.34 pound per hour and 1.5 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B). See b)(2)a.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b.
d.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from any fugitive source shall not exceed 20 percent opacity as a three-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05



was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM₁₀ emissions from this air contaminant source since the calculated annual emission rate of PE/PM₁₀ emissions is less than 10 tons/yr.

- c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the allowable mass emission limitations and the visible emissions limitation.
- d. The hourly and annual emission limitations outlined above are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records or reports are required to demonstrate compliance with this limit.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

- a. the company identification of each material processed; and
- b. the VOC emission rate for each month of operations.

[Authority for term: OAC rule 3745-77-07(C)(1) and ORC 3704.03(T)]

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0106056, issued on 3/29/2010:d)(1). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.



e) Reporting Requirements

- (1) The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0106056, issued on 3/29/2010: e)(1). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

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:

PE/PM₁₀ shall not exceed 0.34 pound per hour and 1.5 tons per year.

Applicable Compliance Method:

Emissions are determined using emission factors from AP-42 Chapter 13.4, Table 13.4-1 as follows:

Multiply the circulating water flow rate (1500 gallons per minute) by the Total Liquid Drift factor (1.7 pounds per 1000 gallons) then by the Total Dissolved Solids (0.22%) and finally by 60 minutes per hour to get the hourly PE/PM₁₀ emissions of 0.34 pound per hour PE/PM₁₀ emissions.

The annual PE/PM₁₀ limitation was developed by multiplying the hourly PE/PM₁₀ limitation by the maximum operating schedule of 8760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual limitation.

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

b. Emission Limitation:

Visible particulate emissions from any fugitive source shall not exceed 20% opacity as a three-minute average.



Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

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

c. Emission Limitation:

VOC emissions shall not exceed 10.14 pounds per hour and 35.9 tons per year.

Applicable Compliance Method:

The hourly emission limitation shall be determined by using emission factors and production information as submitted in the application A0038283 for PTI P0106056. The annual emissions shall be determined by summing the daily emissions and dividing by 2000 pounds per ton.

[Authority for term: OAC rule 3745-77-07(C)(1) and ORC 3704.03(T)]

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #P0106056, issued on 3/29/2010: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.