State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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Columbus, OH 43216-1049

9/11/2009

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No	MODELING SUBMITTED

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1431074278
Permit Number: P0105206
Permit Type: Administrative Modification
County: Hamilton

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

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. If you have any questions regarding this permit, please contact the Hamilton County Dept. of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Hamilton County Dept. of Environmental Services

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Emery Oleochemicals LLC

Facility ID: 1431074278
Permit Number: P0105206
Permit Type: Administrative Modification
Issued: 9/11/2009
Effective: 9/11/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Emery Oleochemicals LLC

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Authorization

Facility ID: 1431074278
Facility Description:
Application Number(s): M0000517
Permit Number: P0105206
Permit Description: Administrative permit amendment to change control devices for P010 and P017 to regenerative thermal oxidizers and to add OAC 3745-21-13 and CFR 40 part 63 subpart FFFF.
Permit Type: Administrative Modification
Permit Fee: $500.00
Issue Date: 9/11/2009
Effective Date: 9/11/2009

This document constitutes issuance to:

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

Of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0105206
Permit Description: Administrative permit amendment to change control devices for P010 and P017 to regenerative thermal oxidizers and to add OAC 3745-21-13 and CFR 40 part 63 subpart FFFF.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P010**
Company Equipment ID:	OZONOLYSIS PROCESS II
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P017**
Company Equipment ID:	OZONOLYSIS PROCESS III
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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. 2.a), Severability Clause

(2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A. 9., Reporting Requirements

(5) Standard Term and Condition A. 10., Applicability

(6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A. 14., Public Disclosure

(8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A. 16., Fees

(10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

c) This permit may be modified, revoked, or revoked and reissued, for cause. 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 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.

4. 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, 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.

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, 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.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Hamilton County Dept. of Environmental Services.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Hamilton County Dept. of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Hamilton County Dept. of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. 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 are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Hamilton County Dept. of Environmental Services in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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.

c) 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 ORC section 3704.08.

(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.

d) The permittee shall submit progress reports to the Hamilton County Dept. of Environmental Services 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Hamilton County Dept. of Environmental Services.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Environmental Services. 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

(i.e., postmarked) 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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

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

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Hamilton County Dept. of Environmental Services must be notified in writing of any transfer of this permit.

18. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

19. 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.

B. Facility-Wide Terms and Conditions

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

   a) None.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts FFFF, National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing: P010 and P017. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart FFFF. The permittee shall also comply with all 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. Emissions Unit Terms and Conditions

1. P010, OZONOLYSIS PROCESS II

Operations, Property and/or Equipment Description:

OZONOLYSIS PROCESS II

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 operations(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. 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)	The organic compound (OC) emissions shall not exceed 2.59 pounds per hour and 11.34 tons per year. See b)(2)d.
b.	OAC rule 3745-21-07(G)	Exempt, see b)(2)b. and b)(2)c.
c.	OAC rule 3745-21-13(F)(1)(d)	See b)(2)e., b)(2)f., and c)(1).
d.	OAC rule 3745-21-16(C)	Exempt. See b)(2)g. and d)6.
e.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) [In accordance with 40 CFR 63.2435, 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)h., and c)(2).
f.	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. This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

c. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(2)b., and e)(2).

d. 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.

e. The permittee shall reduce VOC emissions from Group 1 process vents by at least 98% or emit VOC at a concentration less than 20 ppmv, dry basis, whichever is less stringent.

f. The permittee shall discharge Group 1 process vents to a control device (boiler, process heater, incinerator or recapture device) or combination of control devices that is designed and operated to reduce VOC emissions by at least 98% or emit VOC at a concentration less than 20 ppmv, dry basis, whichever is less stringent. For a combustion device, the concentration of VOC shall be corrected to 3% oxygen.

g. This emissions unit does not currently contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).

h. The permittee shall reduce total hazardous air pollutant (HAP) emissions by $\geq$ 98 percent by weight or to < 20 ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare) or recovery device.

c) Operational Restrictions

(1) The fire box temperature of the regenerative thermal oxidizer, on a daily average, shall not be outside of the range established during the initial or subsequent compliance demonstration.

(2) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2430 – 2550) for daily average fire box temperature requirements.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be less than the average temperature measured (in degrees Fahrenheit) during the most recent compliant stack test.

(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.

(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.

(4) In order to maintain compliance with OAC rule 3745-21-13(F)(1)(d), the permittee shall install, calibrate, maintain and operate according the manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall be located as follows:

a. The temperature monitoring device shall be located in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(5) In accordance with OAC rule 3745-21-13(J)(4)d), the permittee shall maintain records of the following:

a. The results of compliance tests conducted pursuant to paragraph (I)(3) of OAC rule 3745-21-13.

b. The results of parameter monitoring during the compliance test, including results of continuous parameter monitoring averaged over the full period of the compliance test.

(6) 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).

(7) See 40 CFR Part 63, Subpart FFF (63.2430 – 2550) for monitoring and recordkeeping requirements.

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;

b. 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;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. 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

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

(2) Prior to employing any photochemically reactive material in this emissions unit, including any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material and the maximum amount to be used, in pounds per hour, and pounds per day.

(3) The permittee shall submit an initial compliance status report in accordance with OAC rule 3745-21-13(K)(2).

(4) The permittee shall submit semi-annual compliance status reports in accordance OAC rule 3745-21-13(K)(3).

(5) The permittee shall submit an applicability notification in accordance with OAC rule 3745-21-13(L).

(6) See 40 CFR Part 63, Subpart FFF (63.2430 – 2550) for reporting requirements.

f) Testing Requirements

(1) 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 within 2.5 years after issuance of the final Title V permit to operate. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide Number 16 based on the results of the initial emissions testing.

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.

(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 within the time periods listed in OAC rule 3745-21-13. Future emissions testing shall be conducted at the frequency specified in Ohio EPA engineering Guide Number 16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the 98% reduction of VOC and/or 20 ppmv VOC limit requirement(s).

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.

(3) The permittee shall comply with the performance testing requirements, as applicable which are specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2430 – 2550). The results of all initial compliance demonstrations shall be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1).

(4) 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 above. 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.

(5) Compliance with the operational restrictions listed in c)(1) and c)(2) shall be demonstrated by the record keeping required in d)(1) through d)(4).

g) Miscellaneous Requirements

(1) The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install 14-04576 issued on May 8, 2007.

2. P017, OZONOLYSIS PROCESS III

Operations, Property and/or Equipment Description:

OZONOLYSIS PROCESS III

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 operations(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. 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)	The organic compound (OC) emissions shall not exceed 2.54 pounds per hour and 11.13 tons per year. See b)(2)d.
b.	OAC rule 3745-21-07(G)	Exempt, see b)(2)b. and b)(2)c.
c.	OAC rule 3745-21-13(F)(1)(d)	See b)(2)e., b)(2)f., and c)(1).
d.	OAC rule 3745-21-16(C)	Exempt. See b)(2)g., and d)6.
e.	40 CFR Part 63, Subpart FFFF (40 CFR 63.2430-2550) [In accordance with 40 CFR 63.2435, 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)h., and c)(2).
f.	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. This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

c. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The requirements of amended OAC rule 3745-21-07 do not apply to emissions units that are installed after February 18, 2008. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(2)b., and e)(2).

d. 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.

e. The permittee shall reduce VOC emissions from Group 1 process vents by at least 98% or emit VOC at a concentration less than 20 ppmv, dry basis, whichever is less stringent.

f. The permittee shall discharge Group 1 process vents to a control device (boiler, process heater, incinerator or recapture device) or combination of control devices that is designed and operated to reduce VOC emissions by at least 98% or emit VOC at a concentration less than 20 ppmv, dry basis, whichever is less stringent. For a combustion device, the concentration of VOC shall be corrected to 3% oxygen.

g. This emissions unit does not currently contain any affected VOC wastewater streams as defined in OAC rule 3745-21-01(Y)(4).

h. The permittee shall reduce total hazardous air pollutant (HAP) emissions by $\geq$ 98 percent by weight or to < 20 ppmv of total organic compound (TOC) or organic HAP by venting Group 1 continuous process vents through a closed-vent system to any combination of control devices (except a flare) or recovery device.

c) Operational Restrictions

(1) The fire box temperature of the regenerative thermal oxidizer, on a daily average, shall not be outside of the range established during the initial or subsequent compliance demonstration.

(2) See 40 CFR Part 63, Subpart FFFF (40 CFR 63.2430 – 2550) for daily average fire box temperature requirements.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be less than the average temperature measured (in degrees Fahrenheit) during the most recent compliant stack test.

(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.

(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.

(4) In order to maintain compliance with OAC rule 3745-21-13(F)(1)(d), the permittee shall install, calibrate, maintain and operate according the manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall be located as follows:

a. The temperature monitoring device shall be located in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(5) In accordance with OAC rule 3745-21-13(J)(4)d), the permittee shall maintain records of the following:

a. The results of compliance tests conducted pursuant to paragraph (I)(3) of OAC rule 3745-21-13.

b. The results of parameter monitoring during the compliance test, including results of continuous parameter monitoring averaged over the full period of the compliance test.

(6) 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).

(7) See 40 CFR Part 63, Subpart FFF (63.2430 – 2550) for monitoring and recordkeeping requirements.

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;

b. 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;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. 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

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

(2) Prior to employing any photochemically reactive material in this emissions unit, including any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material and the maximum amount to be used, in pounds per hour, and pounds per day.

(3) The permittee shall submit an initial compliance status report in accordance with OAC rule 3745-21-13(K)(2).

(4) The permittee shall submit semi-annual compliance status reports in accordance OAC rule 3745-21-13(K)(3).

(5) The permittee shall submit an applicability notification in accordance with OAC rule 3745-21-13(L).

(6) See 40 CFR Part 63, Subpart FFF (63.2430 – 2550) for reporting requirements.

f) Testing Requirements

(1) 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 within 2.5 years after issuance of the final Title V permit to operate. Future emissions testing shall be conducted at the frequency specified in Ohio EPA Engineering Guide Number 16 based on the results of the initial emissions testing.

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.

(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 within the time periods listed in OAC rule 3745-21-13. Future emissions testing shall be conducted at the frequency specified in Ohio EPA engineering Guide Number 16 based on the results of the initial emissions testing.

b. The emission testing shall be conducted to demonstrate compliance with the 98% reduction of VOC and/or 20 ppmv VOC limit requirement(s).

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.

(3) The permittee shall comply with the performance testing requirements, as applicable which are specified in 40 CFR Part 63, Subpart FFFF (40 CFR 63.2430 – 2550). The results of all initial compliance demonstrations shall be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in 40 CFR 63.2520(d)(1).

(4) Emission limitations:

The organic compound (OC) emissions shall not exceed 2.54 pounds per hour and 11.13 tons per year.

Applicable compliance method:

Compliance with the short term emission rate shall be demonstrated by the emission testing requirements above. 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.

(5) Compliance with the operational restrictions listed in c)(1) and c)(2) shall be demonstrated by the record keeping required in d)(1) through d)(4).

g) Miscellaneous Requirements

(1) The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install 14-04576 issued on May 8, 2007.