



State of Ohio Environmental Protection Agency

Street Address:

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

11/28/01

**RE: Proposed Title V Chapter 3745-77 Permit
14-31-07-0035
Cognis Corp**

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Cognis Corp, has been created in Ohio EPA's State Air Resources System (STARS) on 11/28/01, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 11/28/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 14-31-07-0035 to:

Cognis Corp
4900 Este Avenue
Cincinnati, OH 45232-1419

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B002 (BOILER NO. 3), B009 (BUILDING 52 THERMINOL HEATER), B013 (BUILDING 56 THERMINOL HEATER), B014 (BOILER NO. 4), B015 (BOILER NO. 5), B027 (BOILER NO. 1), B028 (BOILER NO. 2), P004 (HIGH PRESSURE SPLITTERS HPS-2 - HPS-6), P007 (SOLVENT SEPARATION PLANT A), P010 (OZONOLYSIS PROCESS II), P016 (M-102 ESTERIFIER), P017 (OZONOLYSIS PROCESS III), and P019 (HIGH PRESSURE SPLITTER HPS-7).

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping 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:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- 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.
- 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:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to

the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. 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.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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 appropriate Ohio EPA District Office or local air agency 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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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).

3. 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.

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. 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.

7. Fees

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

8. Marketable Permit Programs

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

9. Reasonably Anticipated Operating Scenarios

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen 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.

11. Federal and State Enforceability

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

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

15. Emergencies

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

16. Off Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission 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; and
- 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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

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

18. Insignificant Activity

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

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from 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 appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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

4. 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.

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

6. Permit Transfers

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

7. 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.

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. 40 CFR Part 68 is an applicable requirement for this facility. The permittee shall comply with the Risk Management Plan submitted to the Hamilton County Department of Environmental Services.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B001 Building 56 Dowtherm Vaporizer
B003 Ozone III Process Furnace
B004 Ozone III Dowtherm Vaporizer
B006 Ozone II Process Furnace
B007 Ozone II Dowtherm Vaporizer
B012 Boiler No. 6
B018 B-30 Dowtherm Vaporizer
B019 B-28 Dowtherm Vaporizer
B021 Building 39 Dowtherm Vaporizer
B026 B-23 Dowtherm Vaporizer
J004 Fatty Acid Unloading Line
P002 Fatty Acid Beaching and Shipping
P012 Stearic Flaking and Shipping
P015 Azelaic Purification
P018 B-70 Still
P020 Continuous Hydrogenation
P022 M-22 Esterifier
P026 B-22 Still
P027 B-23 Still
P029 B-25 Still
P030 B-26 Still
P031 B-27 Still
P032 B-28 Still
P033 B-30 Still
P037 C-6 Autoclave
P044 Oleochemicals Drumming
P052 M-152 Esterifier
P054 APG(R) Surfactants Production
P055 APG(R) Surfactants Loading
P056 APG(R) Surfactants Carbohydrates Unloading
P060 Fatty Alcohol Unit 109
P069 Methyl Ester Loading
P073 Coconut Fatty Acids Blowout Drum
P093 B-31 Still
P096 Azelaic Purification II
P098 Lubricants Blending and Drying
P901 Fatty Alcohol Flaking
T001 Y-546 Oleic Acid Tank
T003 Y-538 Ester Fuels Tank
T005 751T17 Ethanol Storage Tank
T028 Y-259 Ester Fuels Tank
T029 M-40 Ester Fuels Tank
T037 Y-73 Fatty Acid Tank
T058 Y-156 Fatty Acid Tank
T059 Y-162 Fatty Acid Tank
T061 Y-164 Fatty Acid Tank
T065 Y-278 Residue Storage Tank
Z001 B-52 Still Gas Firing
Z002 B-27 Still Gas Firing
Z003 Front End Incinerator No.1
Z008 Y-30 Methanol Tank
Z009 Front End Incinerator No.2
Z018 Vacuum Pump, Building 11
Z020 600-Gallon Multipurpose Research Reactor
Z021 Pilot Plant Hot Oil Heater
Z022 Pilot Plant Still Firing
Z024 Y-167 Fuel Oil Day Tank
Z034 -Ash Handling System

B. State Only Enforceable Section (continued)

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 3 (B002)

Activity Description: Oil-fired steam boiler.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
12 MMBtu/hr #4 Oil-Fired Boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.37 lb of particulate emissions(PE)/MMBtu of actual heat input
	OAC rule 3745-18-06(C)	1.6 lbs SO ₂ /MMBtu of actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The quality of the oil burned in this emissions unit on an "as received" basis shall meet the following specification:

A combination of the heat content and sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide per MMBtu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

- 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 (percent by weight) and heat content (Btu per gallon), and the sulfur dioxide emissions in lbs per MMBtu actual heat input.
- 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 the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the appropriate Ohio EPA District Office or local air agency that identify each oil shipment, received for burning in this emissions unit, which exceeded the sulfur dioxide emission limit of 1.6 pounds per MMBtu actual heat input.

For each shipment of oil resulting in a sulfur dioxide emissions exceedance for this emissions unit, the permittee also shall submit the permittee's or oil supplier's analyses that document the sulfur content (percent), heat content (Btu/gallon), and quantity of oil received.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limits for visible emissions as established in OAC rule 3745-17-07(A) shall be demonstrated by methods outlined in OAC rule 3745-17-03(B)(1).
2. Emission Limitations-
0.37 lb of PE/MMBtu of actual heat input

Applicable compliance method:

For the use of no. 4 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 7.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

3. Compliance with the emission limit for sulfur dioxide as established in OAC rule 3745-18-06(C) shall be demonstrated using the equation specified in OAC rule 3745-18-04(G) and the analyses and record keeping specified in A.III.

If required, compliance with the SO₂ emission limit shall be demonstrated by emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 6.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BUILDING 52 THERMINOL HEATER (B009)

Activity Description: Gas-fired therminol heater supporting batch hydrogenation and dimerization processes.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
15 MMBtu/hr Natural Gas-Fired Boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/MMBtu of actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the emission limits for visible emissions as established in OAC rule 3745-17-07(A) shall be demonstrated by methods outlined in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input

Applicable compliance method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BUILDING 56 THERMINOL HEATER (B013)

Activity Description: Gas-fired Therminol heater supporting esterification processes.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
15 MMBtu/hr Natural Gas-Fired Boiler	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/MMBtu of actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

- Compliance with the emission limits for visible emissions as established in OAC rule 3745-17-07(A) shall be demonstrated by methods outlined in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

2. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input

Applicable compliance method:

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 4 (B014)

Activity Description: Gas-fired steam boiler with fuel oil backup.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
154 MMBtu/hr Natural Gas/# 4 Fuel Oil Boiler with Low NOx Burners	OAC rule 3745-31-05(D) (PTI 14-3091)	0.2 lb NOx/MMBtu of actual heat input when burning natural gas
		0.45 lb NOx/MMBtu of actual heat input when burning #4 fuel oil
		See A.II.1-A.II.3.
	40 CFR Part 60, Subpart Db	The applicable emission limitations specified in 40 CFR Part 60, Subpart Db are less stringent than the emission limitations established under OAC 3745-31-05(D).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/MMBtu of actual heat input when burning only natural gas
	OAC rule 3745-17-10(C)(1)	0.18 lb PE/MMBtu of actual heat input when burning #4 fuel oil
	OAC rule 3745-18-37(D)(1)	0.0 lb SO ₂ /MMBtu of actual heat input when burning natural gas
		0.8 lb SO ₂ /MMBtu of actual heat input when burning #4 fuel oil (#4 fuel oil shall not be burned in this emissions unit until a stack height of 213 feet is achieved).
	OAC rule 3745-18-37(D)(4)	See A.II.5.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The natural gas burned in this boiler shall have a heat content greater than nine hundred fifty Btu per standard cubic foot, a sulfur content less than 0.5 pound per million standard cubic feet, and a nitrogen content of 0.30 percent by weight or less.
2. The total heat input from the combustion of natural gas shall not exceed 129,360 MMBtu/yr.
3. The annual capacity factor shall not exceed 10 percent from the use of natural gas, as a rolling, 12-month summation.
4. Should sulfur dioxide emissions exceed 0.0 pound of sulfur per MMBtu of actual heat input, a minimum stack height of 213 feet above ground level shall be in place.
5. A combined operating rate of six hundred ninety-five MMBtu per hour shall not be exceeded by B027, B014, and B015.
6. The quality of the oil received for burning in this emissions unit shall have a combination of heat content and sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.8 pound of sulfur dioxide/MMBtu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis:
 - a. the total amount of natural gas burned in this emissions unit, in cubic feet;
 - b. the total heat input per month from the combustion of natural gas (line a. X 1000 Btu/cubic foot);
 - c. the year-to-date total heat input from the combustion of natural gas (the year-to-date summation of the monthly values recorded in line c.); and
 - d. the total amount of #4 fuel oil burned in this emissions unit, in thousand(s) of gallons.
2. The permittee shall calculate and record the capacity factor for natural gas at the end of each calendar month. In addition to the monthly capacity factor, the permittee shall calculate and record the annual capacity factor. The annual capacity factor shall be determined based on a rolling, 12-month summation.
3. 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 the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
4. 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 (percent by weight) and heat content (Btu per gallon), and the sulfur dioxide emissions in lbs per MMBtu of actual heat input.
5. When burning No. 4 fuel oil, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
6. The permittee shall collect and record the average hourly input rating, in pounds of steam per hour, and the actual heat input, in MMBtu per hour, for B014, B015, and B027, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of all exceedances of the 129,360 MMBtu/yr heat input operating limitation for the combustion of natural gas;
 - b. an identification of all exceedances of the annual capacity factor of 10 percent when burning natural gas; and
 - c. an identification of all exceedances of the combined (for emissions units B027, B014, B015) operating rate of six hundred ninety-five MMBtu/hr.
2. The permittee shall submit annual reports that specify the following:
 - a. the annual capacity factor for natural gas; and
 - b. a summary of the total heat input from the combustion of natural gas.

These reports shall be submitted by February 15 of each year, and shall cover the previous calendar year of operation.

3. The permittee shall submit, on a quarterly basis, summary reports of the permittee's or oil supplier's analyses for each shipment of oil that is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included in the summary report for each shipment:
 - a. the total quantity of oil received (gallons); and
 - b. the calculated sulfur dioxide emission rate (pounds/mmBtu).

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit when burning #4 fuel oil and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. If #4 fuel oil is burned in this emissions unit, and the stack height for this emissions unit is less than 213 feet above ground level, the permittee shall immediately report such occurrence to the Hamilton County Department of Environmental Services.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

V. Testing Requirements (continued)

7. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas
0.18 lb of PE/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4. fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 7.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
154 MMBtu/hr Natural Gas/# 4 Fuel Oil Boiler with Low NOx Burners	OAC rule 3745-31-05(A)(3) (PTI 14-3091)	Combined emissions from emissions units B014 and B015 shall not exceed: 83.1 TPY PE* 1018.77 TPY SO ₂ * 824.33 TPY NO _x * 66.04 TPY CO* 9.28 TPY OC *
		*The TPY emission limitations are based on the emissions units' (B014 and B015 combined) potentials to emit. Therefore no record keeping or reporting is necessary to demonstrate compliance.
		The following short term emission limitations shall not be exceeded when burning natural gas:
		0.0032 lb PE/MMBtu* of actual heat input 0.043 lb CO/MMBtu* of actual heat input 0.0018 lb OC/MMBtu* of actual heat input
		*The short term PE, CO, and OC emission limits are based on the emissions unit's potentials to emit. Therefore, no daily record keeping or reporting is required to demonstrate compliance with these limits.
		The following short term emission limitations shall not be exceeded when burning #4 fuel oil:

Facility Name: **Henkel Corporation, Chemicals Group**

Facility ID: **14-31-07-0035**

Emissions Unit: **BOILER NO. 4 (B014)**

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

0.047 lb PE/MMBtu* of actual heat
input
0.033 lb CO/MMBtu* of actual heat
input
0.0051 lb OC/MMBtu* of actual heat
input
0.58 lb SO₂/MMBtu* of actual heat
input

*The short term SO₂, PE, CO, and
OC emission limits are based on the
emissions unit's potential to emit.
Therefore, no daily record keeping
or reporting is required to
demonstrate compliance with these
limits.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitations-
0.0032 lb of PE/MMBtu of actual heat input when burning natural gas
0.047 lb of PE/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4. fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 7.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations above pursuant to OAC rule 3745-17-03(B)(9).

2. Emission Limitations-
0.043 lb of CO/MMBtu of actual heat input when burning only natural gas
0.033 lb of CO/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with Method 10, 40 CFR, Part 60, Appendix A.

V. Testing Requirements (continued)

3. Emission Limitations-
0.0018 lb of OC/MMBtu of actual heat input when burning natural gas
0.0051 lb of OC/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs OC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 0.2 lb OC/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitation in accordance with Method 25, 40 CFR, Part 60, Appendix A.

4. Emission Limitation-
0.58 lb SO₂/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method-

Compliance shall be based on the record keeping in A.III.4.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 5 (B015)

Activity Description: Gas-fired steam boiler with fuel oil backup.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
250 MMBtu/hr Natural Gas/# 4 Fuel Oil Boiler with Low NOx Burners	OAC rule 3745-31-05(D) (PTI 14-3091)	0.2 lb NOx/MMBtu of actual heat input when burning natural gas 0.45 lb NOx/MMBtu of actual heat input when burning #4 fuel oil See A.II.1-A.II.3.
	40 CFR Part 60, Subpart Db	The applicable emission limitations specified in 40 CFR Part 60, Subpart Db are less stringent than the emission limitations established under OAC 3745-31-05(D).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/MMBtu of actual heat input when burning only natural gas
	OAC rule 3745-17-10(C)(1)	0.67 lb PE/MMBtu of actual heat input when burning #4 fuel oil
	OAC rule 3745-18-37(D)(1)	0.0 lb SO ₂ /MMBtu of actual heat input when burning natural gas 0.8 lb SO ₂ /MMBtu of actual heat input when burning #4 fuel oil (#4 fuel oil shall not be burned in this emissions unit until a stack height of 213 feet is achieved).
	OAC rule 3745-18-37(D)(4)	See A.II.5.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The natural gas burned in this boiler shall have a heat content greater than nine hundred fifty Btu per standard cubic foot, a sulfur content less than 0.5 pound per million standard cubic feet, and a nitrogen content of 0.30 percent by weight or less.
2. The total heat input from the combustion of natural gas shall not exceed 129,360 MMBtu/yr.
3. The annual capacity factor shall not exceed 10 percent from the use of natural gas, as a rolling, 12-month summation.
4. Should sulfur dioxide emissions exceed 0.0 pound of sulfur per MMBtu of actual heat input, a minimum stack height of 213 feet above ground level shall be in place.
5. A combined operating rate of six hundred ninety-five MMBtu per hour shall not be exceeded by B027, B014, and B015.
6. The quality of the oil received for burning in this emissions unit shall have a combination of heat content and sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.8 pound of sulfur dioxide/MMBtu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis:
 - a. the total amount of natural gas burned in this emissions unit, in cubic feet;
 - b. the total heat input per month from the combustion of natural gas (line a. X 1000 Btu/cubic foot);
 - c. the year-to-date total heat input from the combustion of natural gas (the year-to-date summation of the monthly values recorded in line c.); and
 - d. the total amount of #4 fuel oil burned in this emissions unit, in thousand(s) of gallons.
2. The permittee shall calculate and record the capacity factor for natural gas at the end of each calendar month. In addition to the monthly capacity factor, the permittee shall calculate and record the annual capacity factor. The annual capacity factor shall be determined based on a rolling, 12-month summation.
3. 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 the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
4. 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 (percent by weight) and heat content (Btu per gallon), and the sulfur dioxide emissions in lbs per MMBtu of actual heat input.
5. When burning No. 4 fuel oil, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
6. The permittee shall collect and record the average hourly input rating, in pounds of steam per hour, and the actual heat input, in MMBtu per hour, for B014, B015, and B027, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of all exceedances of the 129,360 MMBtu/yr heat input operating limitation for the combustion of natural gas;
 - b. an identification of all exceedances of the annual capacity factor of 10 percent when burning natural gas; and
 - c. an identification of all exceedances of the combined (for emissions units B027, B014, B015) operating rate of six hundred ninety-five MMBtu/hr.
2. The permittee shall submit annual reports that specify the following:
 - a. the annual capacity factor for natural gas; and
 - b. a summary of the total heat input from the combustion of natural gas.

These reports shall be submitted by February 15 of each year, and shall cover the previous calendar year of operation.

3. The permittee shall submit, on a quarterly basis, summary reports of the permittee's or oil supplier's analyses for each shipment of oil that is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included in the summary report for each shipment:
 - a. the total quantity of oil received (gallons); and
 - b. the calculated sulfur dioxide emission rate (pounds/mmBtu).

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit when burning #4 fuel oil and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. If #4 fuel oil is burned in this emissions unit, and the stack height for this emissions unit is less than 213 feet above ground level, the permittee shall immediately report such occurrence to the Hamilton County Department of Environmental Services.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

V. Testing Requirements (continued)

7. Emission Limitations-
0.020 lb of PE/MMBtu of actual heat input when burning natural gas
0.67 lb of PE/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4. fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 7.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation above pursuant to OAC rule 3745-17-03(B)(9).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
250 MMBtu/hr Natural Gas/# 4 Fuel Oil Boiler with Low NOx Burners	OAC rule 3745-31-05(A)(3) (PTI 14-3091)	<p>Combined emissions from emissions units B014 and B015 shall not exceed:</p> <p>83.1 TPY PE* 1018.77 TPY SO₂* 824.33 TPY NO_x* 66.04 TPY CO* 9.28 TPY OC *</p> <p>*The TPY emission limitations are based on the emissions units' (B014 and B015 combined) potentials to emit. Therefore no record keeping or reporting is necessary to demonstrate compliance.</p> <p>The following short term emission limitations shall not be exceeded when burning natural gas:</p> <p>0.0032 lb PE/MMBtu* of actual heat input 0.043 lb CO/MMBtu* of actual heat input 0.0018 lb OC/MMBtu* of actual heat input</p> <p>*The short term PE, CO, and OC emission limits are based on the emissions unit's potentials to emit. Therefore, no daily record keeping or reporting is required to demonstrate compliance with these limits.</p> <p>The following short term emission limitations shall not be exceeded when burning #4 fuel oil:</p> <p>0.047 lb PE/MMBtu* of actual heat input 0.033 lb CO/MMBtu* of actual heat input 0.0051 lb OC/MMBtu* of actual heat input 0.58 lb SO₂/MMBtu* of actual heat input</p>

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

*The short term SO₂, PE, CO, and OC emission limits are based on the emissions unit's potential to emit. Therefore, no daily record keeping or reporting is required to demonstrate compliance with these limits.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitations-
0.0032 lb of PE/MMBtu of actual heat input when burning natural gas
0.047 lb of PE/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4. fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 7.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations above pursuant to OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

2. Emission Limitations-
0.043 lb of CO/MMBtu of actual heat input when burning only natural gas
0.033 lb of CO/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with Method 10, 40 CFR, Part 60, Appendix A.

3. Emission Limitations-
0.0018 lb of OC/MMBtu of actual heat input when burning natural gas
0.0051 lb of OC/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs OC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning #4 fuel oil-

For the use of #4 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 0.2 lb OC/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Compliance with the annual emission limitation shall be assumed as long as compliance with the lb/MMBtu limitation is maintained (should the annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.1).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitation in accordance with Method 25, 40 CFR, Part 60, Appendix A.

4. Emission Limitation-
0.58 lb SO₂/MMBtu of actual heat input when burning #4 fuel oil

Applicable compliance method-

Compliance shall be based on the record keeping in A.III.4.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 1 (B027)

Activity Description: Steam boiler fired with natural gas, landfill gas, coal, and fuel oil.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
683 MMBtu/Hr Multi-fuel Boiler with ESP	40 CFR Part 60, Subpart Db	See A.I.2.a.-A.I.2.d.
	40 CFR Part 61, Subpart E	See A.I.2.e.
	OAC rule 3745-17-07(A)(1)	The visible particulate emission (PE) limitations specified in OAC 3745-17-07(A) are less stringent than those established by 40 CFR Part 60, Subpart Db.
	OAC rule 3745-17-10(C)	The PE emission limitation specified in OAC rule 3745-17-10 is less stringent than that established by 40 CFR Part 60, Subpart Db.
	OAC rule 3745-18-37(D)(1)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-37(D)(1) is less stringent than that established by 40 CFR Part 60, Subpart Db.
	OAC rule 3745-18-37(D)(4)	See A.II.2.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except for one six-minute period per hour of not more than twenty seven percent opacity.
- 2.b** Sulfur Dioxide Emission Limitations:
 - 1.20 lbs SO₂/MMBtu actual heat input from coal
 - 0.80 lb SO₂/MMBtu actual heat input from fuel oil
- 2.c** Nitrogen Oxides Emission Limitations:
 - 0.20 lb NO_x/MMBtu actual heat input from gaseous fossil fuels
 - 0.30 lb NO_x/MMBtu actual heat input from liquid fossil fuels
 - 0.70 lb NO_x/MMBtu actual heat input from solid fossil fuels

2. Additional Terms and Conditions (continued)

2.d Particulate Emission Limitation:

0.10 lb PE/MMBtu of actual heat input.

2.e Mercury Emission Limitation:

3200 grams mercury/24-hour period

II. Operational Restrictions

1. The ESP shall be in operation during all periods of emissions unit operation except during periods of startup and shutdown that are exempted pursuant to OAC rules 3745-17-07(A)(3)(a)(i) and 3745-17-07(A)(3)(b)(i), or during malfunction periods pursuant to OAC rule 3745-17-07(A)(3)(c).
2. A combined operating rate of six hundred ninety-five MMBtu per hour shall not be exceeded by B027, B014, and B015.
3. The quality of the coal burned in this emissions unit on an "as received" basis shall meet the following specifications:
 - a. A combination of heat content and sulfur content that is sufficient to comply with the allowable SO₂ emission limitation of 1.2 lbs/MMBtu actual heat input.
 - b. A combination of heat content and ash content that is sufficient to comply with the allowable PE emission limitation of 0.10 lb/MMBtu actual heat input.
4. The quality of the oil burned in this emissions unit on an "as received" basis shall meet the following specification:

A combination of heat content and sulfur content that is sufficient to comply with the allowable SO₂ emission limitation of 1.2 lbs/MMBtu actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously monitor and record the steam flow rate, in lbs of steam per hour, and the actual heat input, in MMBtu per hour, from B027, B014 and B015.
2. On a daily basis, the permittee shall collect a representative sample of the coal burned in this emissions unit from each of the three coal feeders. Each daily sample taken shall consist of at least twenty-four sample increments weighing a minimum of two pounds each. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the daily samples that were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

The permittee shall maintain monthly records of the total quantity of coal burned, the results of the analyses for ash content, sulfur content, and heat content, and the calculated SO₂ emission rate for the monthly composite sample (in lbs/MMBtu).

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

3. 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 the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

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 of sulfur dioxide per MMBtu of actual heat input. This calculation shall be performed according to the methods specified in OAC rule 3745-18-04(D).

4. The permittee shall collect monthly samples of each liquid organic residue being disposed of in this emissions unit and combine them into one composite sample. A sufficient number of individual samples shall be collected from each residue so that each composite sample is representative of the average quality of the liquid organic residue being burned.

Each composite sample shall be analyzed for the following: mercury content, in ppm, beryllium content, in ppm, and the heat content, in Btu/gallon.

5. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i).

The temperature monitor and recorder shall be calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

6. The permittee shall record and maintain the following information monthly for the landfill gas combusted in this emissions unit:

- a. the sulfur content and methane content of the landfill gas;
- b. the heat content, in Btu/cubic foot; and
- c. the quantity, in cubic feet, of landfill gas combusted.

7. A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

8. The permittee shall collect and record the following information on a daily basis:
- a. the calendar date;
 - b. the hours of operation;
 - c. the amount and type of each fuel combusted; and
 - d. the average hourly input rating, in lbs of steam per hour.

IV. Reporting Requirements

1. If for any reason the steam flow rate from B027 exceeds 434,346 pounds per hour, the following information shall be reported within 5 business days after the exceedance:
 - a. the date of the exceedance;
 - b. the time interval over which the exceedance occurred;
 - c. the value of the exceedance;
 - d. the cause(s) of the exceedance;
 - e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and
 - f. a copy of the steam chart which shows the exceedance.

2. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons); and
 - b. the calculated SO₂ emissions rate (lbs/MMBtu actual heat input) of the oil received in each shipment.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

4. Annual reports shall be submitted concerning the liquid organic residues being disposed of in emissions unit B027. This report shall include the following information for each monthly composite sample taken:
 - a. the mercury content, in ppm;
 - b. the beryllium content, in ppm; and
 - c. the heat content of the liquid organic residue, in Btu/gallon.

These reports shall be submitted by February 15 of each year, and cover the previous calendar year of operation.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the boiler exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i).

6. Annual reports shall be submitted concerning the landfill gas combusted in emission unit B027. This report shall include the following information:
 - a. the average chemical composition of the landfill gas received;
 - b. the average heat content, in Btu/cubic foot, of the gas received; and
 - c. the total landfill gas combusted.

These reports shall be submitted by February 15 of each year, and shall cover the previous calendar year of operation.

IV. Reporting Requirements (continued)

7. Pursuant to 40 CFR Parts 60.7 and 60.13(h), 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 opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

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 any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

8. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the combined (for emissions units B014, B015, B027) operating rate of six hundred ninety-five MMBtu/hr.
9. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

V. 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 1 year of permit issuance and within six months prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of 0.10 lb PE/MMBtu of actual heat input, when burning coal.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable particulate mass emission rate(s): 40 CFR Part 60, Appendix A, Methods 1 through 5.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

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).

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.

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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

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 1 year of permit issuance and within six months prior to the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the mass emission limitation of 1.2 lbs SO₂/MMBtu of actual heat input, when burning coal.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 40 CFR Part 60, Appendix A, Method 6.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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).

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.

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 Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

3. If required, compliance with the visible particulate emission limitations listed in A.I.1. shall be determined by methods specified in OAC rule 3745-17-03(B)(1).
4. Compliance with the PE emission limit shall be demonstrated by the record keeping requirements in A.III.1. and the testing requirements in A.V.1.
5. Compliance with the SO₂ emission limit shall be demonstrated by the record keeping requirements in A.III.2., A.III.3., and A.III.6. and the testing requirements in A.V.2.

V. Testing Requirements (continued)

6. Compliance with the NO_x emission limits may be demonstrated by the emission factors from AP-42 (External Combustion Sources).

If required, the permittee shall demonstrate compliance with the NO_x emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 7.

7. Compliance with the mercury emission limit may be demonstrated by the record keeping requirements in A.III.4.

VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 2 (B028)

Activity Description: Steam boiler fired with coal and fuel oil.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
38.2 MMBtu/hr coal/oil fired boiler with baghouse	OAC 3745-31-05(D) (PTI 14-312) Prevention of Significant Deterioration (40 CFR 52.21) permit for SO ₂	See A.I.2.a.
	OAC 3745-17-07(A)(1)	Visible particulate emissions (PE) from this emissions unit shall not exceed 20% opacity as a six-minute average, except as specified by rule.
	OAC 3745-17-10(B)	The particulate emission limitation established in OAC 3745-17-10(B) is less stringent than that established pursuant to OAC rule 3745-31-05(D).
	OAC 3745-18-37(D)(3)	The sulfur dioxide emission limitation established in OAC 3745-18-37(D)(3) is equivalent to the limitation established pursuant to PTI 14-312 under 40 CFR 52.21.

2. Additional Terms and Conditions

2.a Emission Limitations:

0.06 lb PE/MMBtu of actual heat input
 0.70 lb NO_x/MMBtu of actual heat input
 1.2 lbs SO₂/MMBtu actual heat input

II. Operational Restrictions

1. The permittee shall maintain and operate the baghouse according to manufacturer's specifications.
2. The pressure drop across the baghouse shall be maintained within the range of 5 to 7 inches of water while the emissions unit is in operation.
3. The coal and fuel oil combusted in this emissions unit shall have, on an "as received" basis, a sufficient heat content and sulfur content to maintain compliance with the sulfur dioxide emission limitation of 1.2 lbs SO₂/MMBtu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect representative daily samples of the coal burned in this emissions unit from each of the three coal feeders. Each daily sample shall consist of at least twenty-four sample increments weighing a minimum of two pounds each. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the daily samples that were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isothermal Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

The permittee shall maintain monthly records of the total quantity of coal burned, the results of the analyses for ash content, sulfur content, and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu).

2. 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 analyses of each sample for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

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). This calculation shall be performed according to methods specified in OAC rule 3745-18-04(D).

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, the results of the permittee's analyses (wet and/or dry) for each monthly composite sample of coal that is collected for this emissions unit. The following information shall also be included for each calendar month within the quarter:
 - a. the total quantity of coal burned; and
 - b. the calculated SO₂ emissions rate in (lbs/MMBtu actual heat input).

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil that is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons); and
 - b. the calculated SO₂ emissions rate (lbs/MMBtu actual heat input) for each shipment.
3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii

V. 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 1 year of permit issuance and within six months prior to the expiration of this permit
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate of 0.06 lb/MMBtu of actual heat input.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable PE emission rate:

For PE - 40 CFR Part 60, Appendix A, Methods 1 through 5

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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).

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.

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.

2. If required, compliance with the visible particulate emission limitations listed in A.I.1. shall be determined by methods specified in OAC rule 3745-17-03(B)(1).
3. Compliance with the PE emission limit shall be demonstrated by the testing requirements in A.V.1.
4. Compliance with the SO₂ emission limit may be demonstrated by the record keeping requirements in A.III.1. and A.III.2.

If required, the permittee shall demonstrate compliance with the SO₂ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 6.

5. Compliance with the NO_x emission limit may be demonstrated by the emission factors from AP-42 (External Combustion Sources).

If required, the permittee shall demonstrate compliance with the NO_x emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 7.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: HIGH PRESSURE SPLITTERS HPS-2 - HPS-6 (P004)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
High Pressure Splitter	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SOLVENT SEPARATION PLANT A (P007)
Activity Description: Fractional crystallization to separate fatty acid mixtures.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Solvent Separation Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: OZONOLYSIS PROCESS II (P010)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ozonolysis Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: M-102 ESTERIFIER (P016)

Activity Description: Esterification and transesterification of fatty acids, fatty alcohols, and esters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Esterifier	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: OZONOLYSIS PROCESS III (P017)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ozonolysis Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: HIGH PRESSURE SPLITTER HPS-7 (P019)

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
High Pressure Splitter	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: M-35 ESTERIFIER (P024)

Activity Description: Esterification and transesterification of fatty acids, fatty alcohols, and esters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Esterifier	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: M-45 ESTERIFIER (P025)

Activity Description: Esterification and transesterification of fatty acids, fatty alcohols, and esters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Esterifier	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-5 AUTOCLAVE (P036)

Activity Description: Hydrogenation and polymerization of fatty acids.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Autoclave	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SOLVENT SEPARATION PLANT B (P045)
Activity Description: Fractional crystallization to separate fatty acid mixtures.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Solvent Separation Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SOLVENT SEPARATION PLANT E (P048)
Activity Description: Fractional crystallization to separate fatty acid mixtures.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Solvent Separation Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: M-122 ESTERIFIER (P051)

Activity Description: Esterification and transesterification of fatty acids, fatty alcohols, and esters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Esterifier	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SOLVENT SEPARATION PLANT D (P053)
Activity Description: Fractional crystallization to separate fatty acid mixtures.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Solvent Separation Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FATTY ALCOHOL UNITS 102/104 (P057)

Activity Description: Transesterification and fractionation of crude methyl esters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Fatty Alcohol Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FATTY ALCOHOL UNITS X5/107 (P058)

Activity Description: Hydrogenation of methyl esters and fractionation of fatty alcohols.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Fatty Alcohol Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FATTY ALCOHOL UNITS 103/106/108 (P059)

Activity Description: Recovery and purification of methanol for in-process reuse and recycle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Fatty Alcohol Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable

limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property,

Applicable Rules/

Limitations/Control

Additional Terms and Conditions

None

II.

None

III.

None

IV.

None

V.

None

VI.

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: ESTER STILL AND REFINING (P064)

Activity Description: Distillation and refining of ester raw materials, intermediates, and products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ester Still and Refining	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: METHANOL RECOVERY SYSTEM -- SOLVENTS (P097)

Activity Description: Recovery of methanol from solvent separation processes for use within solvents area.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Methanol Recovery System	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: COOLING TOWER E-1, BUILDING 11 (P100)

Activity Description: E-1 cooling tower servicing direct-contact heat exchangers in stillhouse.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cooling Tower	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: COOLING TOWER E-2, BUILDING 11 (P101)

Activity Description: E-2 cooling tower servicing direct-contact heat exchangers in stillhouse. (Backup for E-1 tower.)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cooling Tower	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: WASTEWATER TREATMENT (P102)

Activity Description: Primary treatment of plant effluent before discharge to POTW.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Wastewater Treatment Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BAROMETRIC COOLING TOWER, BUILDING 56 (P103)

Activity Description: Cooling tower servicing direct-contact heat exchangers in Ester II.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Barometric Cooling Tower	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FATTY ALCOHOL PLANT FUGITIVE EMISSIONS (P801)

Activity Description: Fugitive emissions of methanol from fatty alcohol process units.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Fatty Alcohol Process	OAC rule 3745-21-07(G)	See A.I.2.

2. Additional Terms and Conditions

- 2.a 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).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

1. 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOILER NO. 2 COAL HANDLING (P902)

Activity Description: Coal unloading and conveying to Boiler No. 2.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coal Handling System with Enclosed Conveyors and Baghouse	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack associated with this emissions unit shall not exceed 20% opacity as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	Fugitive visible emissions from the enclosed conveyors shall not exceed 20% opacity as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall operate and maintain the enclosed conveyors and operate the baghouse to control fugitive particulate emissions from this emissions unit.
	OAC rule 3745-17-11(A)	Total of 43.9 lbs PE/hr from all the exhaust stacks, including the baghouse

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 5 to 7 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

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

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any abnormal visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the non-stack egress points from this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. If required, compliance with the visible emission limitations shall be determined in accordance with the methods specified in OAC rules 3745-17-03(B)(1) and 3745-17-03(B)(3), respectively.
2. Compliance with the particulate emission limitation established in OAC 3745-17-11 may be determined by the use of the emission factors contained in Ohio EPA RACM Section 2.3.1 (Material Handling) multiplied by the estimated control efficiency of the baghouse of 95% (1-.95).

If required, compliance with the PE emission limitation shall be demonstrated by emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 5.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coal handling system with enclosed conveyors and fabric filter	OAC rule 3745-31-05(A)(3) (PTI 14-3359)	2.33 lbs PE/hr 10.21 TPY of PE See B.I.2.

2. Additional Terms and Conditions

- 2.a The particulate emission limits are based on the emission unit's potential to emit. Therefore, no record keeping, reporting, or testing is required to demonstrate compliance with these limits.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the particulate emission limitation established in OAC rule 3745-17-11 may be determined by the use of the emission factors contained in RACM Section 2.3.1 (Material Handling) multiplied by the estimated control efficiency of the baghouse of 95%(1-.95).

If required, compliance with the PE emission limit shall be demonstrated by emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 5.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 751T09 METHANOL STORAGE TANK (T008)

Activity Description: Methanol storage for fatty alcohol process.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,700-Gallon Methanol Storage Tank with Packed Tower Scrubber	40 CFR Part 60, Subpart Kb OAC rule 3745-21-07(D)	See A.III.1. The permittee shall employ a submerged fill pipe when loading volatile photochemically reactive materials.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- In accordance with 40 CFR 60.116b(a) and (b), the owner and operator of this storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,700-Gallon Methanol Storage Tank with Packed Tower Scrubber	OAC rule 3745-31-05(A)(3) (PTI 14-1897)	1.18 TPY Organic Compounds

2. Additional Terms and Conditions

- 2.a The permittee shall operate and maintain a packed tower scrubber in a manner that will reduce emissions by a minimum of 80% by weight.

II. Operational Restrictions

1. The maximum annual throughput of methanol shall not exceed that stated in the Title V permit application submitted on November 12, 1996.
2. The pressure drop across the scrubber shall be maintained at a value of not less than 2 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly and annual (based on a calendar year) records of the methanol throughput in gallons.
2. The permittee shall properly operate and maintain equipment to continuously monitor and record the pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day for the scrubber:

- a. The pressure drop across the scrubber, in inches of water.
- b. The downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit annual reports that specify the annual methanol throughput.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the scrubber did not comply with the allowable value specified above.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

Facility Name: **Henkel Corporation, Chemicals Group**
Facility ID: **14-31-07-0035**
Emissions Unit: **751T09 METHANOL STORAGE TANK (T008)**

V. Testing Requirements

1. Compliance with the emission limitation of 1.18 TPY of OC shall be determined by calculating the uncontrolled OC emission rate by employing the appropriate emission factors from AP-42 (Fixed Roof Storage Tanks) and then multiplying this value by 1 minus (the overall control efficiency of the scrubber/100%).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 751T10 METHANOL STORAGE TANK (T009)

Activity Description: Methanol storage for fatty alcohol process.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,700-Gallon Methanol Storage Tank with Packed Tower Scrubber	40 CFR Part 60, Subpart Kb OAC rule 3745-21-07(D)	See A.III.1. The permittee shall employ a submerged fill pipe when loading volatile photochemically reactive materials.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- In accordance with 40 CFR 60.116b(a) and (b), the owner and operator of this storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,700-Gallon Methanol Storage Tank with Packed Tower Scrubber	OAC rule 3745-31-05(A)(3) (PTI 14-1897)	1.18 TPY Organic Compounds

2. Additional Terms and Conditions

- 2.a The permittee shall operate and maintain a packed tower scrubber in a manner that will reduce emissions by a minimum of 80% by weight.

II. Operational Restrictions

1. The maximum annual throughput of methanol shall not exceed that stated in the Title V permit application submitted on November 12, 1996.
2. The pressure drop across the scrubber shall be maintained at a value of not less than 2 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly and annual (based on a calendar year) records of the methanol throughput in gallons.
2. The permittee shall properly operate and maintain equipment to continuously monitor and record the pressure drop across the scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day for the scrubber:

- a. The pressure drop across the scrubber, in inches of water.
- b. The downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit annual reports that specify the annual methanol throughput.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the scrubber did not comply with the allowable value specified above.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

Facility Name: **Henkel Corporation, Chemicals Group**
Facility ID: **14-31-07-0035**
Emissions Unit: **751T10 METHANOL STORAGE TANK (T009)**

V. Testing Requirements

1. Compliance with the emission limitation of 1.18 TPY of OC shall be determined by calculating the uncontrolled OC emission rate by employing the appropriate emission factors from AP-42 (Fixed Roof Storage Tanks) and then multiplying this value by 1 minus (the overall control efficiency of the scrubber/100%).

VI. Miscellaneous Requirements

None