



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

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

07/27/01

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

06-84-02-0008
Amoco Polymers Inc.
Julia M. Hume
Route 7 South
Post Office Box 446
Marietta, OH 45750-0446

Dear Julia M. Hume:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Southeast District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Southeast District Office.

Very truly yours,

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

cc: USEPA (electronically submitted)
Michael Ahern, DAPC PMU
Southeast District Office
Pennsylvania
West Virginia



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 07/27/01	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 06-84-02-0008 to:
 Amoco Polymers Inc.
 Route 7 South
 Post Office Box 446
 Marietta, OH 45750-0446

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

B003 (Dowtherm Heater) Heats hot oil for use in Multipurpose Polymer Process	Produces various colored and filled thermoplastic resins	P017 (Pump FG225A) 107 HP gasoline fired portable water pump FG225A
P003 (Polysulfone Process) Produces a thermoplastic polymer	P010 (Multipurpose Polymer Process) Produces thermoplastic polymers	P019 (Wastewater Operations) Wastewater operations designed to treat waste for discharge to the river.
P007 (Compounding Line A) Produces various colored and filled thermoplastic resins	P011 (Compounding Line H) Produces various colored and filled thermoplastic resins	P020 (Compressor) 110 HP diesel fired portable air compressor
P008 (Compounding Line B)		

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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Southeast District Office
 2195 Front Street
 Logan, OH 43138
 (740) 385-8501

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

None

B. State Only Enforceable Section

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

B005 - boiler #1;
B006 - boiler #2;
B007 - boiler #3;
B008 - boiler #4;
B009 - boiler #5;
B010 - boiler #6;
F001 - paved and unpaved roadways and parking areas;
J001 - rail car loading facility;
J002 - tank truck loading facility;
J003 - loading of solvents from the carbon bed;
P005 - sulfone storage bin and unloading;
P012 - 1.51 mmBtu/hr multifuel fire water pump;
P013 - 1.19 mmBtu/hr diesel fire water pump;
P014 - arc welder (37 hp gasoline);
P015 - arc welder (37hp gasoline);
P901 - plastic resins packaging facility;
T001 - tank PC-501 (recovered monochlorobenzene);
T004 - tank MC-104 Dowtherm tank (hot oil expansion);
T005 - tank MC-880 solvent tank;
T006 - tank MC-881 solvent tank;
T007 - tank MC-882 solvent tank;
T008 - tank MC-883 solvent tank;
T009 - tank MC-884 solvent tank;
T010 - tank MC-885 solvent tank;
T011 - tank MC-890 solvent tank;
T012 - tank MC-891 solvent tank;
T013 - tank MC-892 solvent tank;
T014 - tank MC-893 solvent tank;
T015 - tank MC-911 solvent tank;
T016 - tank MC-912 solvent tank;
T017 - tank MC-913 solvent tank;
T018 - tank MC-920 solvent tank;
T019 - tank MC-930 solvent tank;
T020 - tank PD-105 solvent tank;
T021 - tank SF-536 solvent tank;
T022 - tank PC-502 solvent tank;
T023 - tank PD-133 solvent tank;
T024 - tank PD-160 caustic soda tank;
T025 - tank PC-151 methyl chloride tank;
T026 - tank PD-135 dimethyl sulfoxide tank;
T027 - tank PC-101 methyl chloride tank;
T028 - tank PC-311 polymer solution tank;
T029 - tank PC-313 polymer solution tank;
T030 - tank PC-340 polymer solution blend tank;
T031 - tank PC-609 solvent tank;
T032 - tank PC-610 solvent tank;
T033 - tank-PC-614 process tank;
Z005 - Nauta blender;
Z006 - sand blaster;
Z007 - solvent parts cleaner;

B. State Only Enforceable Section (continued)

Z008 - injection molding machines;
Z009 - lab ovens;
Z010 - lab reactors; and
Z011 - lab furnaces.

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: Dowtherm Heater (B003)

Activity Description: Heats hot oil for use in Multipurpose Polymer Process

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>
20 mmBtu/hr natural gas-fired hot oil heater	OAC rule 3745-31-05(A) (PTI 06-1420) OAC rule 3745-17-07(A) OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 1 tpy. Visible particulate emissions from the hot oil heater shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. Particulate emissions from the hot oil heater shall not exceed 0.020 pound per million Btu of actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

Divide the applicable AP-42, 5th Edition (supplement D issued 7/98) emission factor for filterable particulate matter from table 1.4-2 by the assumed heat content of natural gas (1020 Btu/cubic foot):

$(1.9 \text{ lbs particulate emissions/million cubic feet}) \times (\text{cubic foot}/1020 \text{ Btu}) = 0.00186 \text{ lb particulate emissions/mmBtu}$

Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(9). No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

1.c Emission Limitation:

1 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following calculations:

Divide the applicable AP-42, 5th Edition (supplement D issued 7/98) emission factor for filterable particulate matter from table 1.4-2 by the assumed heat content of natural gas (1020 Btu/cubic foot):

$(1.9 \text{ lbs particulate emissions/million cubic feet}) \times (\text{cubic foot}/1020 \text{ Btu}) = 0.00186 \text{ lb particulate emissions/million Btu}$

$0.00186 \text{ lb particulate emissions/million Btu} \times 20 \text{ mmBtu/hr} \times \text{actual hours of operation/yr} \times .0005 \text{ ton/lb} = \text{ton per year of particulate emissions.}$

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: Polysulfone Process (P003)
Activity Description: Produces a thermoplastic polymer

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>
Udel (polysulfone) unit including two 28,000-gallon storage tanks controlled with parallel carbon adsorption beds and nine baghouses	OAC rule 3745-31-05 (PTI 06-3680)	<p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.</p> <p>Carbon adsorption bed VOC emissions shall not exceed 106 tpy based on rolling, 12-month summations.</p> <p>Carbon adsorption bed VOC removal efficiency shall be at least 95%. See A.I.2.c below.</p> <p>Fugitive VOC emissions shall not exceed 107 tpy based on rolling, 12-month summations.</p> <p>The permittee shall maintain a leak detection and repair program (LDRP) in accordance with permit to install (PTI) 06-3680 effective April 28, 1993, or the most recent version approved by the company and the Ohio EPA, Southeast District Office (see A.III.9 below).</p> <p>Total VOC emissions from this emissions unit shall not exceed 213 tpy based on rolling, 12-month summations.</p> <p>Particulate emissions from all the stacks, including the baghouses, shall not exceed 1.5 lbs/hr and 6.6 tpy.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	40 CFR Part 60, Subpart Kb	See A.III.10 and A.III.11 below.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b This emissions unit does not produce an organic chemical listed in Appendix A of OAC rule 3745-21-09 and, therefore, is not subject to OAC rule 3745-21-09(DD).
- 2.c All VOC emissions from this emissions unit, except the fugitive VOC emissions from process leaks, shall be vented to the carbon adsorption bed. All fugitive VOC emissions are from process leaks and are addressed by the Leak Detection and Repair Program.

II. Operational Restrictions

- 1. The temperature of the carbon bed, after regeneration (including any cooling cycle(s)), shall not be more than 10 percent above the maximum temperature for any regeneration cycle during the most recent emission test that demonstrated the emissions unit was in compliance.
- 2. The parallel carbon adsorption beds shall be switched every 75 minutes of adsorption per the manufacturer's specifications or if the MCB analyzer reading is above 250 ppm for greater than 3 minutes.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the carbon bed after regeneration (including any cooling cycle(s)) when the emissions unit is in operation. Units shall be in degrees Celsius. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 2. The permittee shall collect and record the following information each day:
 - a. the temperature of the carbon bed after each regeneration cycle (including any cooling cycle(s)); and
 - b. a log of the downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- 3. The permittee shall collect and record the following information each day:
 - a. the length of time between each carbon adsorption bed switch, in minutes; and
 - b. the duration, in minutes, of each MCB analyzer reading greater than 250 ppm. If the duration exceeds 3 minutes, the corrective action taken shall also be recorded.

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

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks and baghouse exhausts. The presence or absence of any visible emissions shall be noted in the operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. the cause of the visible emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.
5. The permittee shall collect and record the following information on a monthly basis:
 - a. total polysulfone produced by the emissions unit, in tons;
 - b. total methyl chloride added to the emissions unit, in tons;
 - c. the amount of fugitive methyl chloride, in tons, determined using the commercially available software package called LEAKDAS;
 - d. the amount of monochlorobenzene added to the emissions unit, in tons;
 - e. the amount of monochlorobenzene recovered by the carbon adsorption bed system, in tons; and
 - f. the amount of monochlorobenzene emissions from the carbon adsorption bed system (i.e., (d) - (e)), in tons.

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

6. The permittee shall collect and record the following information on a monthly basis:

a. the monthly carbon adsorption bed VOC emissions, in tons, based on the following equation:

carbon adsorption bed VOC emissions = methyl chloride emissions + monochlorobenzene emissions

where:

methyl chloride emissions = total methyl chloride added to the emissions unit [from A.III.5.b] - (0.00283* x amount of polysulfone produced [from A.III.5.a]) - fugitive methyl chloride [from A.III.5.c]

* The fraction of methyl chloride consumed in the reaction based on the polymer stoichiometry.

monochlorobenzene emissions = the value from A.III.5.f; and

b. the rolling, 12-month summation of carbon adsorption bed VOC emissions, in tons; and

c. the carbon adsorption beds VOC removal efficiency, based on the following equation:

removal efficiency = 100% x [(A - B - C + D) / (A + E)]

where:

A = total methyl chloride added to the emissions unit [from A.III.5.b], in tons;

B = fugitive methyl chloride [from A.III.5.c], in tons;

C = .00283 x amount of polysulfone produced [from A.III.5.a], in tons;

D = amount of monochlorobenzene recovered [from A.III.5.e], in tons; and

E = amount of monochlorobenzene added to the emissions unit [from A.III.5.d], in tons.

7. The permittee shall collect and record the following information on a monthly basis:

a. the monthly fugitive VOC emissions, in tons, determined using the commercially available software package called LEAKDAS; and

b. the rolling, 12-month summation of fugitive VOC emissions, in tons.

8. The permittee shall collect and record the following information on a monthly basis:

a. the monthly total VOC emissions, in tons, determined by adding the monthly carbon adsorption bed VOC emissions and the monthly fugitive VOC emissions; and

b. the rolling, 12-month summation of the total VOC emissions, in tons.

9. The permittee shall maintain a leak detection and repair program (LDRP) in accordance with permit to install (PTI) 06-3680 or the most recent version approved by the company and the Ohio EPA, Southeast District Office. The LDRP emissions screening shall be done in accordance with the procedures set forth in 40 CFR Part 60, Appendix A, Method 21.

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

- 9.a** Except as otherwise provided in the approved plan, equipment shall be monitored for leaks as follows:
- i. The permittee shall perform monthly visual inspections and annual emissions screening of all pumps and agitators in light liquid service (LLS) or heavy liquid service (HLS).
 - ii. The permittee shall perform quarterly emissions screening of all valves, compressors, and pressure relief devices in gas/vapor service and all open-ended lines in LLS, HLS, or gas/vapor service. The monitoring period for valves in gas/vapor service can be changed to one of the methods below if the percent of valves leaking is less than 2. If the percent of valves leaking becomes greater than 2, then quarterly monitoring must be resumed. Ohio EPA shall be notified prior to implementing an alternative monitoring schedule.
 - (a) After two consecutive quarterly monitoring periods in which the percent of valves leaking was less than 2, the monitoring frequency can be changed to skip the first quarter of every two consecutive quarters.
 - (b) After five consecutive quarterly monitoring periods in which the percent of valves leaking was less than 2, the monitoring frequency can be changed to skip the first three quarters of every four consecutive quarters.
 - iii. The permittee shall perform annual emissions screening of all valves and pressure relief devices in LLS or HLS. Ten percent (10%) of all non-exempt flanges and connectors in gas/vapor, LLS, or HLS shall be screened annually.
 - iv. All sources shall be screened within five days after a repair has been made.
- 9.b** The emission screening values shall be recorded and maintained in an appropriate data management system. The information to be recorded shall include the following:
- i. the date;
 - ii. the detector;
 - iii. the source identification (tag #);
 - iv. the screening value;
 - v. the source type;
 - vi. the service (gas/vapor, light liquid, heavy liquid);
 - vii. the comments;
 - viii. the exemptions (if any); and
 - ix. the location.
- 9.c** A leak is defined as a screening value that exceeds 10,000 ppmv or a visible/audible emission of gases or liquids from the sealing surfaces of equipment in VOC service. Upon detection of a leak, the permittee shall take the following steps:
- i. a weatherproof identification tag shall be attached to the leaking equipment;
 - ii. a record of the leak and any attempt to repair it shall be entered into the leak repair log; and
 - iii. a work order for repairs shall be placed the day the leak is detected if the initial attempt at repair is not successful.

The identification tag attached to the leaking equipment can be removed once the leak has been repaired.

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

9.d Leaking equipment shall be repaired within 15 days after the leak was detected. Leaking equipment is considered repaired if the corrected screening value taken after the repair attempt is less than 10,000 ppmv.

A record of the repair attempts shall be entered into the leak repair log or data management system.

After each repair attempt, the leaking equipment shall be rescreened to check effectiveness. The rescreening value shall be recorded in the leak repair log and/or data management system.

i. A first attempt to repair leaking equipment shall be made as soon as practicable, but no later than 5 days from the date the leak was detected. First attempts at repair can include the following:

- (a) tightening of bonnet bolts;
- (b) replacement of bonnet bolts;
- (c) tightening of packing gland nuts; and/or
- (d) injection of lubricant into lubricated packing.

ii. A delay of repair is permissible if one of the following conditions applies:

- (a) the repair of the leaking equipment would require a process unit shutdown;
- (b) the leaking equipment is isolated from the process and is purged; and/or
- (c) the repair of the leaking source would result in more emissions than would occur by a delay of repair.

The repair shall be completed during the next process unit shutdown. A delay of repair may extend beyond the shutdown if delivery of repair parts will be after the planned startup date of the process unit.

9.e The following information shall be kept in a log at a readily accessible location:

- i. a list of the identification numbers for all the equipment subject to the monitoring program;
- ii. the screening values from previous monitoring of the sources;
- iii. a list of identification numbers for equipment designated for no detectable emissions;
- iv. a list of identification numbers for equipment tied into closed vent systems;
- v. compliance tests for equipment designated for no detectable leaks which will include the following information:
 - (a) the date of the compliance test;
 - (b) the background level measured during the compliance test;
 - (c) the maximum screening measurement for the equipment during the compliance test;
- vi. a list of identification numbers for equipment designated as difficult or unsafe to monitor with an explanation why it is difficult or unsafe to monitor (includes the equipment which is covered by insulation); and
- vii. information regarding valves which are subject to an alternate monitoring schedule which shall include:
 - (a) a list of identification numbers for valves which are subject to an alternate monitoring schedule based on a skip period, showing a schedule for monitoring and the percent of leaking valves for each monitoring period; and
 - (b) a list of identification numbers for valves which were designated difficult to monitor, with an explanation why it is difficult to monitor, and the monitoring schedule for these valves.

10. The permittee shall maintain readily accessible records showing the dimensions of the two 28,000-gallon tanks and an analysis showing the capacity of the vessels. These records shall be kept for the life of the emissions unit.

11. The permittee shall maintain a record of the volatile organic liquid (VOL) stored in the two 28,000-gallon tanks, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Records shall be retained for a minimum of two years.

IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration (including any cooling cycle(s)) exceeded the temperature limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which use of an individual carbon adsorption bed exceeded 75 minutes and/or use of an individual bed continued for greater than 3 minutes while the MCB analyzer reading was greater than 250 ppm.
3. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible particulate emissions were observed from the stacks and/or baghouse exhausts 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.
4. The permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate Ohio EPA District Office or local air agency) that identify each monthly record showing :
 - a. each exceedence of the rolling, 12-month carbon adsorption bed VOC emission limit;
 - b. each exceedence of the rolling, 12-month fugitive VOC emission limit;
 - c. each exceedence of the rolling, 12-month total VOC emission limit; and/or
 - d. each exceedence of the 95% control efficiency requirement for VOC.
5. The permittee shall submit semiannual LDRP reports in accordance with the most recent approved plan. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by February 1 and August 1 of each year and shall cover the previous 6-month period. The reports shall include the following:
 - a. the process unit identification;
 - b. the number of pumps in light liquid service excluding those exempt from monitoring based on no detectable emissions or use of an approved barrier fluid seal system;
 - c. the number of valves in gas/vapor service as well as the number of those valves exempt based on no detectable emissions, the number of those subject to an alternative monitoring schedule, and the number of remaining valves which are subject to the normal monitoring schedule;
 - d. for each quarter during the semiannual period:
 - i. the number of pumps in light liquid service in which leaks were detected;
 - ii. the number of pumps in light liquid service in which leaks were not repaired within 15 days from the date detected;
 - iii. the number of valves in gas/vapor or light liquid service in which leaks were detected;
 - iv. the number of valves in gas/vapor or light liquid service in which leaks were not repaired within 15 days from the date detected;
 - v. an explanation for those leaking sources which had a delay of repair;
 - e. the dates that the process unit was shutdown during that semiannual period;
 - f. the number of additions and deletions of sources made to the process unit during that semiannual period; and
 - g. the list of valves which have been added to an alternative monitoring schedule during the semiannual period.

V. Testing Requirements

1. Compliance with the emission limitations and the operational restriction in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Operational Restriction:

Carbon adsorption bed VOC removal efficiency shall be at least 95%

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in section A.V.2 and the record keeping in section A.III.6.c.

1.b Emission Limitations:

106 tpy of carbon adsorption bed VOC emissions, based on rolling, 12-month summations

107 tpy of fugitive VOC emissions, based on rolling, 12-month summations

213 tpy of total VOC emissions, based on rolling, 12-month summations

Applicable Compliance Method:

Compliance with the rolling, 12-month summation limitation for carbon adsorption bed VOCs shall be demonstrated based upon the record keeping required in section A.III.6.b.

Compliance with the rolling, 12-month summation limitation for fugitive VOCs shall be demonstrated based upon the record keeping required in section A.III.7.b.

Compliance with the rolling, 12-month summation limitation for total VOCs shall be demonstrated based upon the record keeping required in section A.III.8.b.

1.c Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:

1.5 lbs/hr and 6.6 tpy of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be demonstrated by the permittee as follows:

$1.5 \text{ lbs of particulates/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tpy of particulates}$

For the hourly emission limitation, emission tests may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

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 3 months after issuance of this permit, approximately 2.5 years after permit issuance, and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the removal efficiency limitation for VOCs.
 - c. The following test method shall be employed to demonstrate compliance with the control efficiency limitation for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted 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.
 - e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in "OAC 3745-21-10" or the approved alternative test protocol (e.g., "the mass balance protocol approved on 10/25/95"). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

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.

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: Compounding Line A (P007)
Activity Description: Produces various colored and filled thermoplastic resins

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>
plastic resins compounding line A controlled with a baghouse	OAC rule 3745-31-05 (PTI 06-4832)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. 0.12 lb/hr of particulate emissions 0.53 tpy of particulate emissions 0.50 lb/hr of volatile organic compounds (VOC) 2.19 tpy of VOC
	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the amount of radel produced, in pounds;
 - b. the amount of udel produced, in pounds;
 - c. the total hours of polymer production;
 - d. the overall average hourly polymer production rate for the day, in lbs/hr; and
 - e. the average hourly VOC emission rate, in lb/hr, determined using the following calculation:
$$\frac{[(\text{radel produced} \times \text{radel emission factor of } 0.0009 \text{ lb VOC per lb radel produced}) + (\text{udel produced} \times \text{udel emission factor of } 0.00025 \text{ lb VOC per lb udel produced})]}{\text{total hours of polymer production}}$$
2. The permittee shall collect and record the following information each year for this emissions unit:
 - a. the annual production rate for each product type, in tons per year;
 - b. the total production rate, in tons per year;
 - c. the annual VOC emissions for each product type, in tons per year, obtained by multiplying the annual production rate from section A.III.2.a by the associated VOC emission factor (radel = 0.0009, udel = 0.00025) to obtain the VOC emissions in tpy; and
 - d. the total annual VOC emissions, in tons per year, obtained by summing the annual VOC emissions for each product type.
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 a weekly basis.

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 permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.12 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the production rate in section A.III.1.d by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in lbs/hr.

Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

1.b Emission Limitation:

0.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total production rate, in tpy, in section A.III.2.b by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in tpy.

1.c Emission Limitation:

0.50 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.1.e.

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

1.d Emission Limitation:

2.19 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.2.d.

1.e Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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: Compounding Line B (P008)
Activity Description: Produces various colored and filled thermoplastic resins

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>
plastic resins compounding line B controlled with a baghouse	OAC rule 3745-31-05 (PTI 06-4832)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. 0.12 lb/hr of particulate emissions 0.53 tpy of particulate emissions 0.50 lb/hr of volatile organic compounds (VOC) 2.19 tpy of VOC
	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the amount of radel produced, in pounds;
 - b. the amount of udel produced, in pounds;
 - c. the total hours of polymer production;
 - d. the overall average hourly polymer production rate for the day, in lb/hr; and
 - e. the average hourly VOC emission rate, in lb/hr, determined using the following calculation:
$$\frac{[(\text{radel produced} \times \text{radel emission factor of } 0.0009 \text{ lb VOC per lb radel produced}) + (\text{udel produced} \times \text{udel emission factor of } 0.00025 \text{ lb VOC per lb udel produced})]}{\text{total hours of polymer production}}$$
2. The permittee shall collect and record the following information each year for this emissions unit:
 - a. the annual production rate for each product type, in tons per year;
 - b. the total production rate, in tons per year;
 - c. the annual VOC emissions for each product type, in tons per year, obtained by multiplying the annual production rate from section A.III.2.a by the associated VOC emission factor (radel = 0.0009, udel = 0.00025) to obtain the VOC emissions in tpy; and
 - d. the total annual VOC emissions, in tons per year, obtained by summing the annual VOC emissions for each product type.
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 a weekly basis.

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 permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.12 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the production rate in section A.III.1.d by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in lbs/hr.

Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

1.b Emission Limitation:

0.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total production rate, in tpy, in section A.III.2.b by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in tpy.

1.c Emission Limitation:

0.50 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.1.e.

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

1.d Emission Limitation:

2.19 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.2.d.

1.e Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Compounding Line B (P008)

Activity Description: Produces various colored and filled thermoplastic resins

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>
plastic resins compounding line B controlled with a baghouse	OAC rule 3745-31-05 (PTI 06-4832)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. 0.12 lb/hr of particulate emissions 0.53 tpy of particulate emissions 0.50 lb/hr of volatile organic compounds (VOC) 2.19 tpy of VOC
	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the amount of radel produced, in pounds;
 - b. the amount of udel produced, in pounds;
 - c. the total hours of polymer production;
 - d. the overall average hourly polymer production rate for the day, in lb/hr; and
 - e. the average hourly VOC emission rate, in lb/hr, determined using the following calculation:
$$\frac{[(\text{radel produced} \times \text{radel emission factor of } 0.0009 \text{ lb VOC per lb radel produced}) + (\text{udel produced} \times \text{udel emission factor of } 0.00025 \text{ lb VOC per lb udel produced})]}{\text{total hours of polymer production}}$$
2. The permittee shall collect and record the following information each year for this emissions unit:
 - a. the annual production rate for each product type, in tons per year;
 - b. the total production rate, in tons per year;
 - c. the annual VOC emissions for each product type, in tons per year, obtained by multiplying the annual production rate from section A.III.2.a by the associated VOC emission factor (radel = 0.0009, udel = 0.00025) to obtain the VOC emissions in tpy; and
 - d. the total annual VOC emissions, in tons per year, obtained by summing the annual VOC emissions for each product type.
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 a weekly basis.

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 permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.12 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the production rate in section A.III.1.d by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in lbs/hr.

Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

1.b Emission Limitation:

0.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total production rate, in tpy, in section A.III.2.b by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in tpy.

1.c Emission Limitation:

0.50 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.1.e.

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

1.d Emission Limitation:

2.19 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.2.d.

1.e Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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: Multipurpose Polymer Process (P010)
Activity Description: Produces thermoplastic polymers

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>
multipurpose polymers unit including a 20,000-gallon surge tank controlled with parallel carbon adsorption beds and nine baghouses	OAC rule 3745-31-05 (PTI 06-4127)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07. Carbon adsorption bed VOC emissions shall not exceed 74.6 tpy based on rolling, 12-month summations. Carbon adsorption bed VOC removal efficiency shall be at least 95%. See A.I.2.c below. Fugitive VOC emissions shall not exceed 58.5 tpy based on rolling, 12-month summations. The permittee shall maintain a leak detection and repair program (LDRP) in accordance with permit to install (PTI) 06-4127 effective August 17, 1994, or the most recent version approved by the company and the Ohio EPA, Southeast District Office (see A.III.9 below). Total VOC emissions from this emissions unit shall not exceed 133.1 tpy based on rolling, 12-month summations. Particulate emissions from all the stacks, including the baghouses, shall not exceed 0.25 lb/hr and 1 tpy. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(A)	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 60, Subpart Kb	See A.III.10, A.III.11, and A.IV.6 below.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a** The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b** This emissions unit does not produce an organic chemical listed in Appendix A of OAC rule 3745-21-09 and, therefore, is not subject to OAC rule 3745-21-09(DD).
- 2.c** All VOC emissions from this emissions unit, except the fugitive VOC emissions from process leaks, shall be vented to the carbon adsorption bed. All fugitive VOC emissions are from process leaks and are addressed by the Leak Detection and Repair Program.

II. Operational Restrictions

- 1.** The temperature of the carbon bed, after regeneration (including any cooling cycle(s)), shall not be more than 10 percent above the maximum temperature for any regeneration cycle during the most recent emission test that demonstrated the emissions unit was in compliance.
- 2.** The parallel carbon adsorption beds shall be switched every 75 minutes of adsorption per the manufacturer's specifications or if the MCB analyzer reading is above 250 ppm for greater than 3 minutes.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the carbon bed after regeneration (including any cooling cycle(s)) when the emissions unit is in operation. Units shall be in degrees Celsius. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 2.** The permittee shall collect and record the following information each day:
 - a. the temperature of the carbon bed after each regeneration cycle (including any cooling cycle(s)); and
 - b. a log of the downtime for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- 3.** The permittee shall collect and record the following information each day:
 - a. the length of time between each carbon adsorption bed switch, in minutes; and
 - b. the duration, in minutes, of each MCB analyzer reading greater than 250 ppm. If the duration exceeds 3 minutes, the corrective action taken shall also be recorded.
- 4.** The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks and baghouse exhausts. The presence or absence of any visible emissions shall be noted in the operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. the cause of the visible emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to eliminate the visible emissions.

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

5. The permittee shall collect and record the following information on a monthly basis:
- a. total polysulfone produced by the emissions unit, in tons;
 - b. total methyl chloride added to the emissions unit, in tons;
 - c. the amount of fugitive methyl chloride, in tons, determined using the commercially available software package called LEAKDAS;
 - d. the amount of monochlorobenzene added to the emissions unit, in tons;
 - e. the amount of monochlorobenzene recovered by the carbon adsorption bed system, in tons; and
 - f. the amount of monochlorobenzene emissions from the carbon adsorption bed system (i.e., (d) - (e)), in tons.

6. The permittee shall collect and record the following information on a monthly basis:

- a. the monthly carbon adsorption bed VOC emissions, in tons, based on the following equation:

carbon adsorption bed VOC emissions = methyl chloride emissions + monochlorobenzene emissions

where:

methyl chloride emissions = total methyl chloride added to the emissions unit [from A.III.5.b] - (0.00283* x amount of polysulfone produced [from A.III.5.a]) - fugitive methyl chloride [from A.III.5.c]

* The fraction of methyl chloride consumed in the reaction based on the polymer stoichiometry.

monochlorobenzene emissions = the value from A.III.5.f; and

- b. the rolling, 12-month summation of carbon adsorption bed VOC emissions, in tons; and

- c. the carbon adsorption beds VOC removal efficiency, based on the following equation:

removal efficiency = $100\% \times [(A - B - C + D) / (A + E)]$

where:

A = total methyl chloride added to the emissions unit [from A.III.5.b], in tons;

B = fugitive methyl chloride [from A.III.5.c], in tons;

C = .00283 x amount of polysulfone produced [from A.III.5.a], in tons;

D = amount of monochlorobenzene recovered [from A.III.5.e], in tons; and

E = amount of monochlorobenzene added to the emissions unit [from A.III.5.d], in tons.

7. The permittee shall collect and record the following information on a monthly basis:

- a. the monthly fugitive VOC emissions, in tons, determined using the commercially available software package called LEAKDAS; and

- b. the rolling, 12-month summation of fugitive VOC emissions, in tons.

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

8. The permittee shall collect and record the following information on a monthly basis:
 - a. the monthly total VOC emissions, in tons, determined by adding the monthly carbon adsorption bed VOC emissions and the monthly fugitive VOC emissions; and
 - b. the rolling, 12-month summation of the total VOC emissions, in tons.
9. The permittee shall maintain a leak detection and repair program (LDRP) in accordance with permit to install (PTI) 06-4127 or the most recent version approved by the company and the Ohio EPA, Southeast District Office. The LDRP emissions screening shall be done in accordance with the procedures set forth in 40 CFR Part 60, Appendix A, Method 21.
- 9.a Except as otherwise provided in the approved plan, equipment shall be monitored for leaks as follows:
 - i. The permittee shall perform monthly visual inspections and annual emissions screening of all pumps and agitators in light liquid service (LLS) or heavy liquid service (HLS).
 - ii. The permittee shall perform quarterly emissions screening of all valves, compressors, and pressure relief devices in gas/vapor service and all open-ended lines in LLS, HLS, or gas/vapor service. The monitoring period for valves in gas/vapor service can be changed to one of the methods below if the percent of valves leaking is less than 2. If the percent of valves leaking becomes greater than 2, then quarterly monitoring must be resumed. Ohio EPA shall be notified prior to implementing an alternative monitoring schedule.
 - (a) After two consecutive quarterly monitoring periods in which the percent of valves leaking was less than 2, the monitoring frequency can be changed to skip the first quarter of every two consecutive quarters.
 - (b) After five consecutive quarterly monitoring periods in which the percent of valves leaking was less than 2, the monitoring frequency can be changed to skip the first three quarters of every four consecutive quarters.
 - iii. The permittee shall perform annual emissions screening of all valves and pressure relief devices in LLS or HLS. Ten percent (10%) of all non-exempt flanges and connectors in gas/vapor, LLS, or HLS shall be screened annually.
 - iv. All sources shall be screened within five days after a repair has been made.
- 9.b The emission screening values shall be recorded and maintained in an appropriate data management system. The information to be recorded shall include the following:
 - i. the date;
 - ii. the detector;
 - iii. the source identification (tag #);
 - iv. the screening value;
 - v. the source type;
 - vi. the service (gas/vapor, light liquid, heavy liquid);
 - vii. the comments;
 - viii. the exemptions (if any); and
 - ix. the location.
- 9.c A leak is defined as a screening value that exceeds 10,000 ppmv or a visible/audible emission of gases or liquids from the sealing surfaces of equipment in VOC service. Upon detection of a leak, the permittee shall take the following steps:
 - i. a weatherproof identification tag shall be attached to the leaking equipment;
 - ii. a record of the leak and any attempt to repair it shall be entered into the leak repair log; and
 - iii. a work order for repairs shall be placed the day the leak is detected if the initial attempt at repair is not successful.

The identification tag attached to the leaking equipment can be removed once the leak has been repaired.

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

9.d Leaking equipment shall be repaired within 15 days after the leak was detected. Leaking equipment is considered repaired if the corrected screening value taken after the repair attempt is less than 10,000 ppmv.

A record of the repair attempts shall be entered into the leak repair log or data management system.

After each repair attempt, the leaking equipment shall be rescreened to check effectiveness. The rescreening value shall be recorded in the leak repair log and/or data management system.

i. A first attempt to repair leaking equipment shall be made as soon as practicable, but no later than 5 days from the date the leak was detected. First attempts at repair can include the following:

- (a) tightening of bonnet bolts;
- (b) replacement of bonnet bolts;
- (c) tightening of packing gland nuts; and/or
- (d) injection of lubricant into lubricated packing.

ii. A delay of repair is permissible if one of the following conditions applies:

- (a) the repair of the leaking equipment would require a process unit shutdown;
- (b) the leaking equipment is isolated from the process and is purged; and/or
- (c) the repair of the leaking source would result in more emissions than would occur by a delay of repair.

The repair shall be completed during the next process unit shutdown. A delay of repair may extend beyond the shutdown if delivery of repair parts will be after the planned startup date of the process unit.

9.e The following information shall be kept in a log at a readily accessible location:

- i. a list of the identification numbers for all the equipment subject to the monitoring program;
- ii. the screening values from previous monitoring of the sources;
- iii. a list of identification numbers for equipment designated for no detectable emissions;
- iv. a list of identification numbers for equipment tied into closed vent systems;
- v. compliance tests for equipment designated for no detectable leaks which will include the following information:
 - a. the date of the compliance test;
 - b. the background level measured during the compliance test;
 - c. the maximum screening measurement for the equipment during the compliance test;
- vi. a list of identification numbers for equipment designated as difficult or unsafe to monitor with an explanation why it is difficult or unsafe to monitor (includes the equipment which is covered by insulation); and
- vii. information regarding valves which are subject to an alternate monitoring schedule which shall include:
 - a. a list of identification numbers for valves which are subject to an alternate monitoring schedule based on a skip period, showing a schedule for monitoring and the percent of leaking valves for each monitoring period; and
 - b. a list of identification numbers for valves which were designated difficult to monitor, with an explanation why it is difficult to monitor, and the monitoring schedule for these valves.

10. The permittee shall maintain readily accessible records showing the dimensions of the surge tank and an analysis showing the capacity of the vessel. These records shall be kept for the life of the emissions unit.

11. The permittee shall maintain a record of the volatile organic liquid (VOL) stored in the surge tank, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Records shall be retained for a minimum of two years.

IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration (including any cooling cycle(s)) exceeded the temperature limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which use of an individual carbon adsorption bed exceeded 75 minutes and/or use of an individual bed continued for greater than 3 minutes while the MCB analyzer reading was greater than 250 ppm.
3. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible particulate emissions were observed from the stacks and/or baghouse exhausts 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.
4. The permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate Ohio EPA District Office or local air agency) that identify each monthly record showing :
 - a. each exceedence of the rolling, 12-month carbon adsorption bed VOC emission limit;
 - b. each exceedence of the rolling, 12-month fugitive VOC emission limit;
 - c. each exceedence of the rolling, 12-month total VOC emission limit; and/or
 - d. each exceedence of the 95% control efficiency requirement for VOC.
5. The permittee shall submit semiannual LDRP reports in accordance with the most recent approved plan. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by February 1 and August 1 of each year and shall cover the previous 6-month period. The reports shall include the following:
 - a. the process unit identification;
 - b. the number of pumps in light liquid service excluding those exempt from monitoring based on no detectable emissions or use of an approved barrier fluid seal system;
 - c. the number of valves in gas/vapor service as well as the number of those valves exempt based on no detectable emissions, the number of those subject to an alternative monitoring schedule, and the number of remaining valves which are subject to the normal monitoring schedule;
 - d. for each quarter during the semiannual period:
 - i. the number of pumps in light liquid service in which leaks were detected;
 - ii. the number of pumps in light liquid service in which leaks were not repaired within 15 days from the date detected;
 - iii. the number of valves in gas/vapor or light liquid service in which leaks were detected;
 - iv. the number of valves in gas/vapor or light liquid service in which leaks were not repaired within 15 days from the date detected;
 - v. an explanation for those leaking sources which had a delay of repair;
 - e. the dates that the process unit was shutdown during that semiannual period;
 - f. the number of additions and deletions of sources made to the process unit during that semiannual period; and
 - g. the list of valves which have been added to an alternative monitoring schedule during the semiannual period.
6. In accordance with 40 CFR Part 60.116b(d), the permittee shall notify the Ohio EPA Southeast District Office within 30 days when the maximum true vapor pressure of the liquid in the 20,000-gallon surge tank exceeds 27.6 kPa (4.00 psia).

V. Testing Requirements

1. Compliance with the emission limitations and the operational restriction in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Operational Restriction:

Carbon adsorption bed VOC removal efficiency shall be at least 95%

Applicable Compliance Method:

Compliance shall be demonstrated based upon the testing requirements specified in section A.V.2 and the record keeping in section A.III.6.c.

1.b Emission Limitations:

74.6 tpy of carbon adsorption bed VOC emissions, based on rolling, 12-month summations

58.5 tpy of fugitive VOC emissions, based on rolling, 12-month summations

133.1 tpy of total VOC emissions, based on rolling, 12-month summations

Applicable Compliance Method:

Compliance with the rolling, 12-month summation limitation for carbon adsorption bed VOCs shall be demonstrated based upon the record keeping specified in section A.III.6.b.

Compliance with the rolling, 12-month summation limitation for fugitive VOCs shall be demonstrated based upon the record keeping specified in section A.III.7.b.

Compliance with the rolling, 12-month summation limitation for total VOCs shall be demonstrated based upon the record keeping specified in section A.III.8.b.

1.c Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.d Emission Limitation:

0.25 lb/hr and 1 tpy of particulate emissions

Applicable Compliance Method:

Compliance with the annual limitation shall be demonstrated by the permittee as follows:

$0.25 \text{ lb of particulates/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tpy of particulates}$

For the hourly emission limitation, emission tests may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

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 3 months after issuance of this permit, approximately 2.5 years after permit issuance, and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the removal efficiency limitation for VOCs.
 - c. The following test method shall be employed to demonstrate compliance with the control efficiency limitation for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted 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.
 - e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in "OAC 3745-21-10" or the approved alternative test protocol (e.g., "the mass balance protocol approved on 10/25/95"). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."

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.

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: Compounding Line H (P011)
Activity Description: Produces various colored and filled thermoplastic resins

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>
plastic resins compounding line H controlled with a baghouse	OAC rule 3745-31-05 (PTI 06-4832)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07.
		0.12 lb/hr of particulate emissions 0.53 tpy of particulate emissions
		0.50 lb/hr of volatile organic compounds (VOC) 2.19 tpy of VOC
	OAC rule 3745-17-07	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11	See A.I.2.a below.
	OAC rule 3745-21-07	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the amount of radel produced, in pounds;
 - b. the amount of udel produced, in pounds;
 - c. the total hours of polymer production;
 - d. the overall average hourly polymer production rate for the day, in lb/hr; and
 - e. the average hourly VOC emission rate, in lb/hr, determined using the following calculation:
$$\frac{[(\text{radel produced} \times \text{radel emission factor of } 0.0009 \text{ lb VOC per lb radel produced}) + (\text{udel produced} \times \text{udel emission factor of } 0.00025 \text{ lb VOC per lb udel produced})]}{\text{total hours of polymer production}}$$
2. The permittee shall collect and record the following information each year for this emissions unit:
 - a. the annual production rate for each product type, in tons per year;
 - b. the total production rate, in tons per year;
 - c. the annual VOC emissions for each product type, in tons per year, obtained by multiplying the annual production rate from section A.III.2.a by the associated VOC emission factor (radel = 0.0009, udel = 0.00025) to obtain the VOC emissions in tpy; and
 - d. the total annual VOC emissions, in tons per year, obtained by summing the annual VOC emissions for each product type.
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 a weekly basis.

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 permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.12 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the production rate in section A.III.1.d by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in lbs/hr.

Emission tests also may be required in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. No emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

V. Testing Requirements (continued)

1.b Emission Limitation:

0.53 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the total production rate, in tpy, in section A.III.2.b by the B.P. Amoco emission factor of .006 pound per pound of product and by .01 (99% control efficiency of the baghouse) to obtain the particulate emissions in tpy.

1.c Emission Limitation:

0.50 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.1.e.

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

1.d Emission Limitation:

2.19 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section A.III.2.d.

1.e Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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: Pump FG225A (P017)

Activity Description: 107 HP gasoline fired portable water pump FG225A

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>
107 HP gasoline fired portable water pump FG225A	OAC rule 3745-31-05(A) (PTI 06-4780)	2.3 lbs/hr of volatile organic compounds (VOC)
		46.9 lbs/hr of carbon monoxide (CO)
		1.2 lbs/hr of nitrogen oxides (NOx) See A.II.2 below.
	OAC 3745-31-05(D) (PTI 06-4780)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(A)	Particulate emissions shall not exceed 0.25 pound per million Btu actual heat input.
		See A.I.2.a below.
	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions shall not exceed 0.310 pound per million Btu actual heat input.
	OAC rule 3745-17-11(B)(5)(a)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall burn only gasoline as fuel in this emissions unit.
2. The maximum annual operating hours for this emissions unit shall not exceed 600 hours, based upon a rolling, 12 month summation of the operating hours.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than gasoline, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain monthly records of the operating hours for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than gasoline was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c.
3. The permittee shall submit annual reports of the total hours of operation for this emissions unit. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Particulate emissions shall not exceed 0.25 lb/mmBtu actual heat input.

Applicable Compliance Method:

The permittee cannot demonstrate compliance with this emission limitation based upon the current emission factor contained in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96). The Ohio EPA revised the emission limitation specified in this rule citation based upon the currently applicable emission factor. The revised rule was adopted by the Director of Ohio EPA in December of 1997, and it will be submitted to the U.S. EPA as a proposed revision to the Ohio SIP for particulate matter. When the SIP revision is approved by the U.S. EPA, the 0.25 lb/mmBtu actual heat input emission limitation will no longer be applicable, and the permittee will be able to demonstrate compliance with the new emission limitation (0.310 lb/mmBtu actual heat input) using the current emission factor.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.310 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.31 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.c Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

1.d Emission Limitation:

2.3 lbs/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the maximum fuel input of the engine (107 hp-hr/hr X 7,000 Btu/hp-hr X .000001 mmBtu/Btu = 0.749 mmBtu fuel input/hr). Then multiplying the AP-42 total hydrocarbon emission factor from Table 3.3-1 of 3.03 lb/mmBtu X 0.749 mmBtu fuel input/hr gives 2.3 lbs/hr.

1.e Emission Limitation:

46.9 lbs/hr of CO

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the maximum fuel input of the engine (107 hp-hr/hr X 7,000 Btu/hp-hr X .000001 mmBtu/Btu = 0.749 mmBtu fuel input/hr). Then multiplying the AP-42 CO emission factor from Table 3.3-1 of 62.7 lb/mmBtu X 0.749 mmBtu fuel input/hr gives 46.9 lbs/hr.

1.f Emission Limitation:

1.2 lbs/hr of NOx

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the maximum fuel input of the engine (107 hp-hr/hr X 7,000 Btu/hp-hr X .000001 mmBtu/Btu = 0.749 mmBtu fuel input/hr). Then multiplying the AP-42 NOx emission factor from Table 3.3-1 of 1.63 lb/mmBtu X 0.749 mmBtu fuel input/hr gives 1.2 lbs/hr.

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: Wastewater Operations (P019)

Activity Description: Wastewater operations designed to treat waste for discharge to the river.

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 operations	none	none
		See A.I.2.a below.

2. **Additional Terms and Conditions**

- 2.a Pursuant to the provisions of OAC rule 3745-21-07(A)(1) and OAC rule 3745-15-01(O), this emissions unit is an "existing source" which is not located in a "Priority 1" county as indicated in paragraph (A) of OAC rule 3745-21-06. The provisions of OAC rule 3745-21-07(G), therefore, do not apply.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

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>
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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: Compressor (P020)
Activity Description: 110 HP diesel fired portable air compressor

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>
110 HP diesel air compressor.	OAC rule 3745-31-05 (PTI 06-6146)	Particulate emissions shall not exceed .310 lb/mmBtu actual heat input. 0.84 tpy of particulate emissions
		0.23 lb/hr of sulfur dioxide (SO ₂) 0.99 tpy of SO ₂
		0.33 lb/hr of volatile organic compounds (VOC) 1.43 tpy of VOC
		0.73 lb/hr of carbon monoxide (CO) 3.22 tpy of CO
	OAC rule 3745-17-07(A)	3.4 lbs/hr of nitrogen oxides (NO _x) 14.87 tpy of NO _x
		Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
		Particulate emissions shall not exceed .25 lb/mmBtu actual heat input. See A.I.2.a below.
		Particulate emissions shall not exceed .310 lb/mmBtu actual heat input. See A.I.2.b below.
OAC rule 3745-17-11(B)(5)(a)		
OAC rule 3745-17-11(B)(5)(a)		

2. Additional Terms and Conditions

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.310 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

1. The permittee shall burn only diesel fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

1.b Emission Limitation:

Particulate emissions shall not exceed 0.25 lb/mmBtu actual heat input.

Applicable Compliance Method:

The permittee cannot demonstrate compliance with this emission limitation based upon the current emission factor contained in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96). The Ohio EPA revised the emission limitation specified in this rule citation based upon the currently applicable emission factor. The revised rule was adopted by the Director of Ohio EPA in December of 1997, and it will be submitted to the U.S. EPA as a proposed revision to the Ohio SIP for particulate matter. When the SIP revision is approved by the U.S. EPA, the 0.25 lb/mmBtu actual heat input emission limitation will no longer be applicable, and the permittee will be able to demonstrate compliance with the new emission limitation (0.310 lb/mmBtu actual heat input) using the current emission factor.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.310 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.31 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.d Emission Limitation:

0.84 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

$0.310 \text{ lb/mmBtu} \times 0.617 \text{ mmBtu/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{ton per year of particulates.}$

1.e Emission Limitation:

0.23 lb/hr of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated based upon a one time calculation of the potential to emit as described in the following equation:

$$E = EF \times HP = \text{lb/hr}$$

$$E = 2.05 \text{ E-3 lb/hp-hr} \times 110 \text{ hp} = 0.23 \text{ lb/hr}$$

where:

EF = the AP-42, Table 3.3-1 emission factor in lb/horsepower-hour;

HP = the horsepower of the emissions unit; and

E = the hourly emissions.

If required the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for SO₂, Method 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

1.f Emission Limitation:

1 tpy of SO₂

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

$0.23 \text{ lb/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tons per year of SO}_2.$

V. Testing Requirements (continued)

1.g Emission Limitation:

0.33 lb/hr of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon a one time calculation of the potential to emit as described in the following equation:

$$E = EF \times HP = \text{lb/hr}$$

$$E = 2.99 \text{ E-3 lb/hp-hr} \times 110 \text{ hp} = 0.33 \text{ lb/hr}$$

where:

EF = the AP-42, Table 3.3-1 emission factor in lb/horsepower-hour;

HP = the horsepower of the source; and

E = the hourly emissions.

If required the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC, Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

1.h Emission Limitation:

1.43 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

$$0.33 \text{ lb/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tons per year of VOC.}$$

1.i Emission Limitation:

0.73 lb/hr of CO

Applicable Compliance Method:

Compliance shall be demonstrated based upon a one time calculation of the potential to emit as described in the following equation:

$$E = EF \times HP = \text{lb/hr}$$

$$E = 6.68 \text{ E-3 lb/hp-hr} \times 110 \text{ hp} = 0.73 \text{ lb/hr}$$

where:

EF = the AP-42, Table 3.3-1 emission factor in lb/horsepower-hour;

HP = the horsepower of the emissions unit; and

E = the hourly emissions.

If required the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for CO, Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

1.j Emission Limitation:

3.22 tpy of CO

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

$0.73 \text{ lb/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tons per year of CO.}$

1.k Emission Limitation:

3.4 lbs/hr of NO_x

Applicable Compliance Method:

Compliance shall be demonstrated based upon a one time calculation of the potential to emit as described in the following equation:

$E = EF \times HP = \text{lb/hr}$

$E = 0.031 \text{ lb/hp-hr} \times 110 \text{ hp} = 3.4 \text{ lbs/hr}$

where:

EF = the AP-42, Table 3.3-1 emission factor in lb/horsepower-hour;

HP = the horsepower of the emissions unit; and

E = the hourly emissions.

If required the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for NO_x, Method 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

1.l Emission Limitation:

14.87 tpy of NO_x

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

$3.4 \text{ lbs/hr} \times \text{actual hours of operation/yr} \times 0.0005 \text{ ton/lb} = \text{tons per year of NO}_x.$

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

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