



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

Mailing Address:

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

12/12/01

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

01-25-04-0915
Plaskolite, Inc.
Timothy W Ling
1770 Joyce Avenue
Columbus, OH 43219-1026

Dear Timothy W Ling:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Central District Office.

Very truly yours,

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

cc: Central District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 12/12/01	Effective Date: 12/12/01	Expiration Date: 12/12/06
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This document constitutes issuance of a Title V permit for Facility ID: 01-25-04-0915 to:
 Plaskolite, Inc.
 1770 Joyce Avenue
 Columbus, OH 43219-1026

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

P013 (Reactor A) CP - Polymerization Reactor A with Carbon Adsorber	P052 (Reactor C) CP - Polymerization Reactor C with Carbon Absorber	R003 (Flowcoat Line 2) Surface Coating Operation #6, Flowcoat Line 2 with Thermal Oxidizer
P014 (Reactor B) CP - Polymerization Reactor B with Carbon Adsorber	R001 (Flowcoat Line 1) Surface Coating Operation #4, Flowcoat Line 1 with Thermal Oxidizer	R004 (Hardcoat Line 2) Surface Coating Operation #7, Hardcoat Line 2 with Thermal Oxidizer
P015 (Bag Filling Sta # 1) CP - Bag Filling Station #1 with Odor Control		
P042 (Bag Filling Sta # 2) CP - Bag Filling Station #2 with Odor Control		

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

Central District Office
 3232 Alum Creek Drive
 PO Box 1049
 Columbus, OH 43216-1049
 (614) 728-3778

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.

Facility Name: **Plaskolite, Inc.**

Facility ID: **01-25-04-0915**

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:

B002- Boiler # 2
B003- Boiler # 3
J001- Unloading Rack
P003- Oven # 7
P004- Oven # 8
P005- Oven # 9
P006- Oven # 10
P016- Extrusion Silos
P017- Pelletizer PA
P018- Pelletizer PB
P019- Pelletizer PC
P020- Extruder line # 1
P022- Extruder line # 3
P023- Extruder line # 4
P024- Extruder line # 5
P025- Extruder line # 6
P026- Extruder line # 7
P027- Extruder line # 8
P028- Extruder line # 9
P029- Extruder line # 10
P030- Material control
P032- Conversion grinder 1
P033- Oven # 11
P034- Oven # 12
P035- Oven # 13
P036- Oven # 14
P037- Oven # 15
P038- Oven # 16
P040- Oven # 17
P041- Oven # 18
P043- Conversion grinder 2
P044- Extruder line # 11
P045- Grinder # 12
P046- Pelletizer PD
P050- Grinder # 13
P051- Extruder # 12
P053- Pelletizer PE
P054- Extruder # 14
P056- Extrusion Cleanup
P057- Assembly Cleanup
Z001- Oven # 19
Z002- Oven # 20
Z003- Oven # 21
Z004- Oven # 22
Z005- Oven # 23
Z006- Oven # 24
Z007- Silo # 5
Z008- Silo # 6
Z009- Silo # 8
Z010- Silo # 18
Z011- Boxing Station
Z012- Grinder # 1
Z013- Grinder # 2
Z014- Grinder # 4
Z015- Grinder # 5
Z016- Grinder # 6
Z017- Grinder # 7
Z018- Grinder # 8
Z019- Grinder # 10
Z020- Grinder # 11

B. State Only Enforceable Section

- Z020- Grinder # 11
- Z021- Grinder # 14
- Z022- Granutec Grinder
- Z023- Router B
- Z024- Router C
- Z025- Hendrick Saw
- Z026- Schelling Saw
- Z027- Vac Chamber # 1
- Z028- Vac Chamber # 2
- Z034- Silo # 1
- Z035- Silo # 2
- Z036- Silo # 7
- Z037- Silo # 10
- Z038- Silo # 17
- Z039- Diesel Generator
- Z040- Diesel Fire Pump
- Z041- Silo # 9
- Z042- Conversion Cleanup
- Z045- RDG Routers
- Z046- RDG Saws
- Z047- RDG Inspection Room
- Z048- Extrusion Beringer Oven
- Z049- Maintenance Parts Washer
- Z050- Roadways
- Z051- Router D
- Z052- Router E

- T006- Tank A
- T007- Tank B
- T008- Tank C

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: Reactor A (P013)
Activity Description: CP - Polymerization Reactor A with Carbon Adsorber

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>
polymerization reactor with carbon adsorber - Reactor A	OAC rule 3745-31-05(A)(3) (PTI # 01-8090)	Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

2. Additional Terms and Conditions

- 2.a For the purposes of these terms and conditions, a "process unit" shall be defined as the Methylmethacrylate (MMA) and Ethyl Acrylate (EA) unloading system, the MMA and EA storage tank system, and all vents from the reactors that can exhaust directly to the outside atmosphere.
- 2.b For the purposes of these terms and conditions, a "light liquid" means a liquid in which one or more of the pure components within the process fluid has a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit and in which these components are equal to or greater than twenty percent, by weight, of the liquid.
- 2.c For the purposes of these terms and conditions, a "heavy liquid" means a liquid in which the total concentration of the pure components having a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit is less than twenty percent, by weight.
- 2.d For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 2.e This emissions unit's potential to emit for organic compound emissions is less than 8 pounds per hour and 40 pounds per day. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
2. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

II. Operational Restrictions (continued)

3. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions.
4. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
5. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
6. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.II.4 of these terms and conditions at all other times.
7. The permittee shall replace the carbon adsorber upon detection of a concentration of 25 ppm or greater at the outlet of the carbon adsorber.
8. The control equipment shall be operated at all times when emissions may be vented to it.

III. Monitoring and/or Record Keeping Requirements

1. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in sections A.III.1, A.III.1.a-h and A.III.2 of these terms and conditions.
- 1.a Except as otherwise provided in section A.III.1.b of these terms and conditions, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in section A.III.1.d of these terms and conditions shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

- 1.b** For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.1.a.ii of these terms and conditions as follows:
- i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The permittee has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.
 - (b) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- 1.c** Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 1.d** A leak is detected:
- i. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; or
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- 1.e** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following procedures shall be followed:
- i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.1.h of these terms and conditions.
 - iii. The identification tag attached to the leaking equipment, other than a pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions may be removed after the leaking pump or valve is repaired, monitored for leaks for two consecutive months as specified in sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, and found to have no detected leaks during those two consecutive months.
- 1.f** When a leak is detected as described in section A.III.1.d of these terms and conditions, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.1.a.iv of these terms and conditions is less than ten thousand ppmv.

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

- 1.g** When a leak is detected as described in section A.III.1.d of these terms and conditions, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
- i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.
- 1.h** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following information shall be recorded in a leak repair log:
- i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;
 - ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;
 - iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;
 - iv. the methods of repair applied in each attempt to repair the leaking equipment;
 - v. one of the following entries within five working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than ten thousand ppmv;
 - (iii) "above 10,000," denoting not less than ten thousand ppmv;
 - vi. if the leak is not repaired within fifteen calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;
 - (c) the expected date of successful repair of the leak;
 - (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and
 - vii. the dates of process unit shutdowns that occurred within the semiannual period.
- 2.** The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.
- 3.a** A delay or repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
- 3.b** A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

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

- 3.c** A delay of repair for a valve shall be allowed if:
- i. the owner or operator of the valve demonstrates that the emissions of purged material resulting from immediate repair is greater than the emissions likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in section A.II.7 of these terms and conditions.
- 3.d** A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies are deleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- 4.** The following information shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of sections A.II, A.III.1 and A.III.2 of these terms and conditions; and
 - b. a list of identification numbers for pressure relief devices subject to sections A.III.1-3 of these terms and conditions.
- 5.** The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.1.b of these terms and conditions, shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
- 6.** The permittee shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
- 7.** The following information pertaining to control equipment described in section A.II of these terms and conditions shall be recorded and kept in a readily accessible location:
- a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. periods when the control equipment was not operated as designed; and
 - d. dates of start-ups and shutdowns of the control equipment.
- 8.** The permittee shall inspect daily the carbon adsorbers and associated equipment used for control of OC emissions from this emissions unit. This inspection shall be conducted while the emissions unit is in operation and include monitoring of the outlet OC concentration using a photoionization detector or equivalent monitoring device.

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

9. The permittee shall record on a daily basis the following information obtained during the above-referenced carbon adsorber inspections:
 - a. date and time of inspection;
 - b. name and signature of the person conducting the inspection;
 - c. identification of liquid/gas leaks;
 - d. outlet OC concentration, in ppm; and
 - e. date and time of carbon adsorber replacement.

IV. Reporting Requirements

1. Semiannual reports shall be submitted to the Director (the Ohio EPA, Central District Office) by the first day of February and August and shall include the following information for the preceding semiannual periods:
 - a. the process unit identification;
 - b. the number of pumps in light liquid service;
 - c. the number of valves in gas/vapor service;
 - d. for each month during the semiannual period:
 - i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - v. the facts that explain each delay of repair allowed pursuant to sections A.III.3.a-d of these terms and conditions; and
 - e. the dates of process unit shutdowns that occurred within the semiannual period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all instances during which the measured carbon adsorber outlet concentration was greater than 25 ppm and the carbon adsorber was not replaced. The deviation reports shall be submitted in accordance with the procedures specified in the General Terms and Conditions.

V. Testing Requirements

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

Emission Limitations - Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method - Compliance may be based upon the maximum process weight rate of 3000 pounds per hour multiplied by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.

Emission Limitation - Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method - The annual emissions shall be calculated by multiplying the annual process weight rate by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

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: Reactor B (P014)

Activity Description: CP - Polymerization Reactor B with Carbon Adsorber

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>
polymerization reactor with carbon adsorber - Reactor B	OAC rule 3745-31-05(A)(3) (PTI # 01-8090)	Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

2. Additional Terms and Conditions

- 2.a** For the purposes of these terms and conditions, a "process unit" shall be defined as the Methylmethacrylate (MMA) and Ethyl Acrylate (EA) unloading system, the MMA and EA storage tank system, and all vents from the reactors that can exhaust directly to the outside atmosphere.
- 2.b** For the purposes of these terms and conditions, a "light liquid" means a liquid in which one or more of the pure components within the process fluid has a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit and in which these components are equal to or greater than twenty percent, by weight, of the liquid.
- 2.c** For the purposes of these terms and conditions, a "heavy liquid" means a liquid in which the total concentration of the pure components having a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit is less than twenty percent, by weight.
- 2.d** For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 2.e** This emissions unit's potential to emit for organic compound emissions is less than 8 pounds per hour and 40 pounds per day. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
2. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
3. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions.

II. Operational Restrictions (continued)

4. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
5. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
6. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.II.4 of these terms and conditions at all other times.
7. The permittee shall replace the carbon adsorber upon detection of a concentration of 25 ppm or greater at the outlet of the carbon adsorber.
8. The control equipment shall be operated at all times when emissions may be vented to it.

III. Monitoring and/or Record Keeping Requirements

1. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in sections A.III.1, A.III.1.a-h and A.III.2 of these terms and conditions.
- 1.a Except as otherwise provided in section A.III.1.b of these terms and conditions, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in section A.III.1.d of these terms and conditions shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

- 1.b** For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.1.a.ii of these terms and conditions as follows:
- i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The permittee has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.
 - (b) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- 1.c** Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 1.d** A leak is detected:
- i. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; or
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- 1.e** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following procedures shall be followed:
- i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.1.h of these terms and conditions.
 - iii. The identification tag attached to the leaking equipment, other than a pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions may be removed after the leaking pump or valve is repaired, monitored for leaks for two consecutive months as specified in sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, and found to have no detected leaks during those two consecutive months.
- 1.f** When a leak is detected as described in section A.III.1.d of these terms and conditions, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.1.a.iv of these terms and conditions is less than ten thousand ppmv.
- 1.g** When a leak is detected as described in section A.III.1.d of these terms and conditions, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
- i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.

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

- 1.h** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following information shall be recorded in a leak repair log:
- i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;
 - ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;
 - iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;
 - iv. the methods of repair applied in each attempt to repair the leaking equipment;
 - v. one of the following entries within five working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than ten thousand ppmv;
 - (iii) "above 10,000," denoting not less than ten thousand ppmv;
 - vi. if the leak is not repaired within fifteen calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;
 - (c) the expected date of successful repair of the leak;
 - (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and
 - vii. the dates of process unit shutdowns that occurred within the semiannual period.
- 2.** The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.
- 3.a** A delay or repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
- 3.b** A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).
- 3.c** A delay of repair for a valve shall be allowed if:
- i. the owner or operator of the valve demonstrates that the emissions of purged material resulting from immediate repair is greater than the emissions likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in section A.II.7 of these terms and conditions.
- 3.d** A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies are deleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- 4.** The following information shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of sections A.II, A.III.1 and A.III.2 of these terms and conditions; and
 - b. a list of identification numbers for pressure relief devices subject to sections A.III.1-3 of these terms and conditions.

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

5. The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.1.b of these terms and conditions, shall be recorded in a log that is kept in a readily accessible location:
 - a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
6. The permittee shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
7. The following information pertaining to control equipment described in section A.II of these terms and conditions shall be recorded and kept in a readily accessible location:
 - a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. periods when the control equipment was not operated as designed; and
 - d. dates of start-ups and shutdowns of the control equipment.
8. The permittee shall inspect daily the carbon adsorbers and associated equipment used for control of OC emissions from this emissions unit. This inspection shall be conducted while the emissions unit is in operation and include monitoring of the outlet OC concentration using a photoionization detector or equivalent monitoring device.
9. The permittee shall record on a daily basis the following information obtained during the above-referenced carbon adsorber inspections:
 - a. date and time of inspection;
 - b. name and signature of the person conducting the inspection;
 - c. identification of liquid/gas leaks;
 - d. outlet OC concentration, in ppm; and
 - e. date and time of carbon adsorber replacement.

IV. Reporting Requirements

1. Semiannual reports shall be submitted to the Director (the Ohio EPA, Central District Office) by the first day of February and August and shall include the following information for the preceding semiannual periods:
 - a. the process unit identification;
 - b. the number of pumps in light liquid service;
 - c. the number of valves in gas/vapor service;
 - d. for each month during the semiannual period:
 - i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - v. the facts that explain each delay of repair allowed pursuant to sections A.III.3.a-d of these terms and conditions; and
 - e. the dates of process unit shutdowns that occurred within the semiannual period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all instances during which the measured carbon adsorber outlet concentration was greater than 25 ppm and the carbon adsorber was not replaced. The deviation reports shall be submitted in accordance with the procedures specified in the General Terms and Conditions.

V. Testing Requirements

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

Emission Limitations - Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method - Compliance may be based upon the maximum process weight rate of 3000 pounds per hour multiplied by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.

Emission Limitation - Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method - The annual emissions shall be calculated by multiplying the annual process weight rate by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

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: Bag Filling Sta # 1 (P015)
Activity Description: CP - Bag Filling Station #1 with Odor Control

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>
two bay bag filling station with scrubber (for odor control) - Station #1	OAC rule 3745-31-05(A)(3) (PTI # 01-3794)	Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

2. Additional Terms and Conditions

- 2.a For the purposes of these terms and conditions, a "process unit" shall be defined as the Methylmethacrylate (MMA) and Ethyl Acrylate (EA) unloading system, the MMA and EA storage tank system, and all vents from the reactors that can exhaust directly to the outside atmosphere.
- 2.b For the purposes of these terms and conditions, a "light liquid" means a liquid in which one or more of the pure components within the process fluid has a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit and in which these components are equal to or greater than twenty percent, by weight, of the liquid.
- 2.c For the purposes of these terms and conditions, a "heavy liquid" means a liquid in which the total concentration of the pure components having a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit is less than twenty percent, by weight.
- 2.d For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 2.e This emissions unit's potential to emit for organic compound emissions is less than 8 pounds per hour and 40 pounds per day. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
2. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

II. Operational Restrictions (continued)

3. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions.
4. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
5. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
6. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.II.4 of these terms and conditions at all other times.
7. The control equipment shall be operated at all times when emissions may be vented to it.
8. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 0.5 inch of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value of not less than 0.5 gallon per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in sections A.III.1, A.III.1.a-h and A.III.2 of these terms and conditions.
 - 1.a Except as otherwise provided in section A.III.1.b of these terms and conditions, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in section A.III.1.d of these terms and conditions shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

- 1.b** For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.1.a.ii of these terms and conditions as follows:
- i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The permittee has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.
 - (b) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- 1.c** Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 1.d** A leak is detected:
- i. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; or
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- 1.e** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following procedures shall be followed:
- i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.1.h of these terms and conditions.
 - iii. The identification tag attached to the leaking equipment, other than a pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions may be removed after the leaking pump or valve is repaired, monitored for leaks for two consecutive months as specified in sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, and found to have no detected leaks during those two consecutive months.
- 1.f** When a leak is detected as described in section A.III.1.d of these terms and conditions, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.1.a.iv of these terms and conditions is less than ten thousand ppmv.

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

- 1.g** When a leak is detected as described in section A.III.1.d of these terms and conditions, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
- i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.
- 1.h** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following information shall be recorded in a leak repair log:
- i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;
 - ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;
 - iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;
 - iv. the methods of repair applied in each attempt to repair the leaking equipment;
 - v. one of the following entries within five working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than ten thousand ppmv;
 - (iii) "above 10,000," denoting not less than ten thousand ppmv;
 - vi. if the leak is not repaired within fifteen calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;
 - (c) the expected date of successful repair of the leak;
 - (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and
 - vii. the dates of process unit shutdowns that occurred within the semiannual period.
- 2.** The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.
- 3.a** A delay or repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
- 3.b** A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

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

- 3.c** A delay of repair for a valve shall be allowed if:
- i. the permittee demonstrates that the emissions of purged material resulting from immediate repair is greater than the emission likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in section A.II.7 of these terms and conditions.
- 3.d** A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies are deleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- 4.** The following information shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of sections A.II, A.III.1 and A.III.2 of these terms and conditions; and
 - b. a list of identification numbers for pressure relief devices subject to sections A.III.1-3 of these terms and conditions.
- 5.** The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.1.b of these terms and conditions, shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
- 6.** The permittee shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
- 7.** The following information pertaining to control equipment described in section A.II of these terms and conditions shall be recorded and kept in a readily accessible location:
- a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. periods when the control equipment was not operated as designed; and
 - d. dates of start-ups and shutdowns of the control equipment.

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

8. The permittee shall properly install, operate and maintain equipment to monitor and record the pressure drop across the scrubber and the water flow rate while the emissions unit is in operation. The monitoring devices and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The water flow rate, in gpm, on a daily basis.
 - c. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
9. The permittee shall maintain records that document the total number of hours this emissions unit was in operation during the calendar year.

IV. Reporting Requirements

1. Semiannual reports shall be submitted to the Director (the Ohio EPA, Central District Office) by the first day of February and August and shall include the following information for the preceding semiannual periods:
- a. the process unit identification;
 - b. the number of pumps in light liquid service;
 - c. the number of valves in gas/vapor service;
 - d. for each month during the semiannual period:
 - i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - v. the facts that explain each delay of repair allowed pursuant to sections A.III.3.a-d of these terms and conditions; and
 - e. the dates of process unit shutdowns that occurred within the semiannual period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
- a. The static pressure drop across the scrubber.
 - b. The scrubber water flow rate.

The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

V. Testing Requirements

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

Emission Limitation - Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method - Compliance shall be determined by multiplying the emission test results from section A.V below times the actual annual hours of operation.

2. Emission Limitations - Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method - Compliance with these emission limitations shall be demonstrated through the records required pursuant to section A.III and the emission testing requirement specified below.

The permittee shall conduct, or have conducted, OC emission testing for this emissions unit to demonstrate compliance with the 8 pounds per hour emission limitation in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months of permit issuance.
 - b. The following test method(s) shall be employed to determine the mass rate of organic compound emissions from this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.
 - c. The test(s) shall be conducted upstream of the scrubber. Emissions unit P015 shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

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: Bag Filling Sta # 2 (P042)
Activity Description: CP - Bag Filling Station #2 with Odor Control

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>
two bay bag filling station with scrubber (for odor control) - Station #2	OAC rule 3745-31-05(A)(3) (PTI # 01-3794)	Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

2. Additional Terms and Conditions

- 2.a For the purposes of these terms and conditions, a "process unit" shall be defined as the Methylmethacrylate (MMA) and Ethyl Acrylate (EA) unloading system, the MMA and EA storage tank system, and all vents from the reactors that can exhaust directly to the outside atmosphere.
- 2.b For the purposes of these terms and conditions, a "light liquid" means a liquid in which one or more of the pure components within the process fluid has a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit and in which these components are equal to or greater than twenty percent, by weight, of the liquid.
- 2.c For the purposes of these terms and conditions, a "heavy liquid" means a liquid in which the total concentration of the pure components having a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit is less than twenty percent, by weight.
- 2.d For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 2.e This emissions unit's potential to emit for organic compound emissions is less than 8 pounds per hour and 40 pounds per day. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
2. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

II. Operational Restrictions (continued)

3. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions.
4. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
5. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
6. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.II.4 of these terms and conditions at all other times.
7. The control equipment shall be operated at all times when emissions may be vented to it.
8. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 0.5 inch of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value of not less than 0.5 gallon per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in sections A.III.1, A.III.1.a-h and A.III.2 of these terms and conditions.
 - 1.a Except as otherwise provided in section A.III.1.b of these terms and conditions, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in section A.III.1.d of these terms and conditions shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

- 1.b** For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.1.a.ii of these terms and conditions as follows:
- i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The permittee has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.
 - (b) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- 1.c** Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 1.d** A leak is detected:
- i. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; or
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- 1.e** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following procedures shall be followed:
- i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.1.h of these terms and conditions.
 - iii. The identification tag attached to the leaking equipment, other than a pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions may be removed after the leaking pump or valve is repaired, monitored for leaks for two consecutive months as specified in sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, and found to have no detected leaks during those two consecutive months.
- 1.f** When a leak is detected as described in section A.III.1.d of these terms and conditions, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.1.a.iv of these terms and conditions is less than ten thousand ppmv.

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

- 1.g** When a leak is detected as described in section A.III.1.d of these terms and conditions, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
- i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.
- 1.h** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following information shall be recorded in a leak repair log:
- i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;
 - ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;
 - iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;
 - iv. the methods of repair applied in each attempt to repair the leaking equipment;
 - v. one of the following entries within five working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than ten thousand ppmv;
 - (iii) "above 10,000," denoting not less than ten thousand ppmv;
 - vi. if the leak is not repaired within fifteen calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;
 - (c) the expected date of successful repair of the leak;
 - (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and
 - vii. the dates of process unit shutdowns that occurred within the semiannual period.
- 2.** The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.
- 3.a** A delay or repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
- 3.b** A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

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

- 3.c** A delay of repair for a valve shall be allowed if:
- i. the permittee demonstrates that the emissions of purged material resulting from immediate repair is greater than the emission likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in section A.II.7 of these terms and conditions.
- 3.d** A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies are deleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- 4.** The following information shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of sections A.II, A.III.1 and A.III.2 of these terms and conditions; and
 - b. a list of identification numbers for pressure relief devices subject to sections A.III.1-3 of these terms and conditions.
- 5.** The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.1.b of these terms and conditions, shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
- 6.** The permittee shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
- 7.** The following information pertaining to control equipment described in section A.II of these terms and conditions shall be recorded and kept in a readily accessible location:
- a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. periods when the control equipment was not operated as designed; and
 - d. dates of start-ups and shutdowns of the control equipment.

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

8. The permittee shall properly install, operate and maintain equipment to monitor and record the pressure drop across the scrubber and the water flow rate while the emissions unit is in operation. The monitoring devices and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The pressure drop across the scrubber, in inches of water, on a daily basis.
 - b. The water flow rate, in gpm, on a daily basis.
 - c. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
9. The permittee shall maintain records that document the total number of hours this emissions unit was in operation during the calendar year.

IV. Reporting Requirements

1. Semiannual reports shall be submitted to the Director (the Ohio EPA, Central District Office) by the first day of February and August and shall include the following information for the preceding semiannual periods:
- a. the process unit identification;
 - b. the number of pumps in light liquid service;
 - c. the number of valves in gas/vapor service;
 - d. for each month during the semiannual period:
 - i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - v. the facts that explain each delay of repair allowed pursuant to sections A.III.3.a-d of these terms and conditions; and
 - e. the dates of process unit shutdowns that occurred within the semiannual period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
- a. The static pressure drop across the scrubber.
 - b. The scrubber water flow rate.

The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

V. Testing Requirements

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

Emission Limitation - Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method - Compliance shall be determined by multiplying the emission test results from section A.V below times the actual annual hours of operation.

2. Emission Limitations - Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method - Compliance with these emission limitations shall be demonstrated through the records required pursuant to section A.III and the emission testing requirement specified below.

The permittee shall conduct, or have conducted, OC emission testing for this emissions unit to demonstrate compliance with the 8 pounds per hour emission limitation in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months of permit issuance.
 - b. The following test method(s) shall be employed to determine the mass rate of organic compound emissions from this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.
 - c. The test(s) shall be conducted upstream of the scrubber. Emissions unit P042 shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

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: Reactor C (P052)

Activity Description: CP - Polymerization Reactor C with Carbon Absorber

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>
polymerization reactor with carbon adsorber - Reactor C	OAC rule 3745-31-05(A)(3) (PTI # 01-8090)	Organic compound emissions shall not exceed 7.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

2. Additional Terms and Conditions

- 2.a For the purposes of these terms and conditions, a "process unit" shall be defined as the Methylmethacrylate (MMA) and Ethyl Acrylate (EA) unloading system, the MMA and EA storage tank system, and all vents from the reactors that can exhaust directly to the outside atmosphere.
- 2.b For the purposes of these terms and conditions, a "light liquid" means a liquid in which one or more of the pure components within the process fluid has a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit and in which these components are equal to or greater than twenty percent, by weight, of the liquid.
- 2.c For the purposes of these terms and conditions, a "heavy liquid" means a liquid in which the total concentration of the pure components having a vapor pressure greater than 0.04 pound per square inch at sixty-eight degrees Fahrenheit is less than twenty percent, by weight.
- 2.d For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 2.e This emissions unit's potential to emit for organic compound emissions is less than 8 pounds per hour and 40 pounds per day. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

II. Operational Restrictions

1. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
2. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

II. Operational Restrictions (continued)

3. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions.
4. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
5. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
6. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with section A.II.4 of these terms and conditions at all other times.
7. The permittee shall replace the carbon adsorber upon detection of a concentration of 25 ppm or greater at the outlet of the carbon adsorber.
8. The control equipment shall be operated at all times when emissions may be vented to it.

III. Monitoring and/or Record Keeping Requirements

1. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in sections A.III.1, A.III.1.a-h and A.III.2 of these terms and conditions.
 - 1.a Except as otherwise provided in section A.III.1.b of these terms and conditions, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in section A.III.1.d of these terms and conditions shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

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

- 1.b** For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in section A.III.1.a.ii of these terms and conditions as follows:
- i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The permittee has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.
 - (b) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- 1.c** Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 1.d** A leak is detected:
- i. when a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; or
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- 1.e** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following procedures shall be followed:
- i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to section A.III.1.h of these terms and conditions.
 - iii. The identification tag attached to the leaking equipment, other than a pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking pump or valve that is monitored pursuant to sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions may be removed after the leaking pump or valve is repaired, monitored for leaks for two consecutive months as specified in sections A.III.1.a.i and A.III.1.a.ii of these terms and conditions, and found to have no detected leaks during those two consecutive months.
- 1.f** When a leak is detected as described in section A.III.1.d of these terms and conditions, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in sections A.III.3.a-d of these terms and conditions. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to section A.III.1.a.iv of these terms and conditions is less than ten thousand ppmv.

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

- 1.g** When a leak is detected as described in section A.III.1.d of these terms and conditions, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
- i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.
- 1.h** When a leak is detected as described in section A.III.1.d of these terms and conditions, the following information shall be recorded in a leak repair log:
- i. the identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;
 - ii. the basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;
 - iii. the date on which the leak was detected and the date of each attempt to repair the leaking equipment;
 - iv. the methods of repair applied in each attempt to repair the leaking equipment;
 - v. one of the following entries within five working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than ten thousand ppmv;
 - (iii) "above 10,000," denoting not less than ten thousand ppmv;
 - vi. if the leak is not repaired within fifteen calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator whose decision it was that repair is technically infeasible without a process unit shutdown;
 - (c) the expected date of successful repair of the leak;
 - (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and
 - vii. the dates of process unit shutdowns that occurred within the semiannual period.
- 2.** The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.
- 3.a** A delay or repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
- 3.b** A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

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

- 3.c** A delay of repair for a valve shall be allowed if:
- i. the owner or operator of the valve demonstrates that the emissions of purged material resulting from immediate repair is greater than the emissions likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in section A.II.7 of these terms and conditions.
- 3.d** A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies are deleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- 4.** The following information shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for equipment subject to the requirements of sections A.II, A.III.1 and A.III.2 of these terms and conditions; and
 - b. a list of identification numbers for pressure relief devices subject to sections A.III.1-3 of these terms and conditions.
- 5.** The following information pertaining to valves subject to an alternative monitoring schedule, as provided in section A.III.1.b of these terms and conditions, shall be recorded in a log that is kept in a readily accessible location:
- a. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - b. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - c. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
- 6.** The permittee shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
- 7.** The following information pertaining to control equipment described in section A.II of these terms and conditions shall be recorded and kept in a readily accessible location:
- a. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - b. the dates and descriptions of any changes in the design specifications;
 - c. periods when the control equipment was not operated as designed; and
 - d. dates of start-ups and shutdowns of the control equipment.
- 8.** The permittee shall inspect daily the carbon adsorbers and associated equipment used for control of OC emissions from this emissions unit. This inspection shall be conducted while the emissions unit is in operation and include monitoring of the outlet OC concentration using a photoionization detector or equivalent monitoring device.

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

9. The permittee shall record on a daily basis the following information obtained during the above-referenced carbon adsorber inspections:
 - a. date and time of inspection;
 - b. name and signature of the person conducting the inspection;
 - c. identification of liquid/gas leaks;
 - d. outlet OC concentration, in ppm; and
 - e. date and time of carbon adsorber replacement.

IV. Reporting Requirements

1. Semiannual reports shall be submitted to the Director (the Ohio EPA, Central District Office) by the first day of February and August and shall include the following information for the preceding semiannual periods:
 - a. the process unit identification;
 - b. the number of pumps in light liquid service;
 - c. the number of valves in gas/vapor service;
 - d. for each month during the semiannual period:
 - i. the number of pumps in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - ii. the number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - iii. the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in section A.III.1.d of these terms and conditions;
 - iv. the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;
 - v. the facts that explain each delay of repair allowed pursuant to sections A.III.3.a-d of these terms and conditions; and
 - e. the dates of process unit shutdowns that occurred within the semiannual period.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all instances during which the measured carbon adsorber outlet concentration was greater than 25 ppm and the carbon adsorber was not replaced. The deviation reports shall be submitted in accordance with the procedures specified in the General Terms and Conditions.

V. Testing Requirements

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

Emission Limitations - Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method - Compliance may be based upon the maximum process weight rate of 3000 pounds per hour multiplied by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A.

Emission Limitation - Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method - The annual emissions shall be calculated by multiplying the annual process weight rate by the AP-42 , Fifth Edition, Volume I, Chapter 6, Table 6.6.4-1(9/91) emission factor of 0.7 pound OC per ton.

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: Flowcoat Line 1 (R001)

Activity Description: Surface Coating Operation #4, Flowcoat Line 1 with Thermal Oxidizer

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>
surface coating operation #4 (Flowcoat Line 1) controlled by a catalytic oxidizer	OAC rule 3745-31-05(A)(3) (PTI # 01-7849)	Organic compound emissions shall not exceed 12 pounds per hour and 52.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(6)	See A.I.2.a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	85% overall reduction, by weight, of the OC emissions.

2. Additional Terms and Conditions

- 2.a The permittee shall control OC emissions from this emissions unit through the use of a catalytic incinerator with a minimum destruction efficiency of 95%.

II. Operational Restrictions

1. The permittee shall operate the catalytic incinerator at all times that the emissions unit is in operation.
2. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorders which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 - b. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.
 - c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall collect and record the following information each day for this emissions unit:
 - a. The name and identification number of each coating, as applied.
 - b. The OC content of each coating, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The OC content of each cleanup material, in pounds per gallon.
 - g. The total number of hours the emissions unit was operated.
 - h. The total uncontrolled OC emission rate from all coatings and cleanup materials, in pounds (i.e., sum of (b)x(c) for all coatings + sum of (e)x(f) for all cleanup materials).
 - i. The calculated, controlled OC emission rate for all coatings and cleanup materials, in pounds or tons. The controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
 - j. The average hourly controlled OC emission rate, in pounds per hour, i.e., (i)/(g).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the allowable hourly emission rate. These reports shall be submitted according to the General Terms and Conditions of this permit.
3. The permittee shall also submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation: 85% overall reduction, by weight, in the OC emissions;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted approximately 6 months prior to permit expiration.
- b. The following test method(s) shall be employed to determine the overall control efficiency of the control equipment serving this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.
- c. The test(s) shall be conducted while this emissions unit is venting OC emissions to the catalytic incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.
- d. The overall control efficiency of the control equipment serving this emissions unit shall be demonstrated based upon the results of the capture efficiency and control efficiency tests specified above. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency" dated January 9, 1995.

(The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 Section A.V.1.b above and OAC rule 3745-21-10. 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 Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

2. Emission Limitation: Organic compound emissions shall not exceed 12 pounds per hour.

Applicable Compliance Method: Compliance shall be based upon the records required pursuant to Section A.III.2.j and the emission testing required in Section A.V.1 above.

Emission Limitation: Organic compound emissions shall not exceed 52.3 tons per year.

Applicable Compliance Method: Compliance shall be based upon the summation of the daily OC emission rate as calculated in Section A.III.2.i for the calendar year.

Emission Limitation: The permittee shall control OC emissions from this emissions unit through the use of a catalytic incinerator with a minimum destruction efficiency of 95%.

Applicable Compliance Method: Compliance shall be based upon the emission testing required in Section A.V.1 above.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
surface coating operation #4 (Flowcoat Line 1) controlled by a catalytic oxidizer		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for this emissions unit (R001) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropyl Alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr):12

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 427.7

MAGLC (ug/m3): 23,405

Pollutant: 1-methoxy 2-propanol

TLV (ug/m3): 368,510

Maximum Hourly Emission Rate (lbs/hr):12

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 427.7

MAGLC (ug/m3): 8,774

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

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Flowcoat Line 2 (R003)

Activity Description: Surface Coating Operation #6, Flowcoat Line 2 with Thermal Oxidizer

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>
surface coating operation #6 (Flowcoat Line 2) controlled by a permanent total enclosure and a thermal incinerator	OAC rule 3745-31-05(A)(3) (PTI # 01-8222)	The best available technology (BAT) determination for this emissions unit is compliance with the control requirements and emission limitations specified in Sections A.1.2.a-c below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The permittee shall control OC emissions from this emissions unit through the use of a permanent total enclosure(PTE) and a thermal incinerator with a minimum control efficiency of 95%.
- 2.b Organic compound(OC) emissions shall not exceed 12 pounds per hour and 52.3 tons per year.
- 2.c The PTE serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a PTE in Method 204 (40 CFR Part 51, Appendix M) whenever the emissions unit is in operation.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a daily basis for this emissions unit:
 - a. The name and identification number of each coating, as applied.
 - b. The OC content of each coating, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The OC content of each cleanup material, in pounds per gallon.
 - g. The total number of hours the unit is operated.
 - h. The total uncontrolled OC emission rate from all coating and cleanup materials, in pounds (i.e., sum of (b)x(c) of all coatings + sum of (e)x(f) of all cleanup materials).
 - i. The calculated, controlled OC emission rate for all coatings and cleanup materials, in pounds or tons. The controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
 - j. The average hourly controlled OC emission rate, in pounds per hour, i.e., (i)/(g).
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. 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, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the allowable hourly emission rate. These reports shall be submitted according to the General Terms and Conditions of this permit.
2. The permittee shall also submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly summaries of the following records:
 - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
 - b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
2. Emission Limitation: The permittee shall control OC emissions from this emissions unit through the use of a permanent total enclosure and a thermal incinerator with a minimum control efficiency of 95%.

Applicable Compliance Method: The permittee shall conduct, or have conducted, OC emission testing for this emissions unit to demonstrate compliance with the minimum overall reduction and minimum control efficiency requirements of Section A.I.1 in accordance with the following requirements:

- a. The emission testing shall be conducted approximately 6 months prior to permit expiration.
- b. The following test methods shall be employed to determine the overall control efficiency of the control equipment serving this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.
- c. The test(s) shall be conducted while this emissions unit is venting OC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

The overall control efficiency of the control equipment serving this emissions unit shall be demonstrated based upon the results of the capture efficiency and control efficiency tests specified above. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 Section A.V.1.a above and OAC rule 3745-21-10. 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.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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 Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

3. Emission Limitation: Organic compound emissions shall not exceed 12 pounds per hour.

Applicable Compliance Method: Compliance with this emission limitation shall be demonstrated through the records required pursuant to Section A.III.1.j and the emission testing required pursuant to Section A.V.2.

4. Emission Limitation: Organic compound emissions shall not exceed 52.3 tons per year.

Applicable Compliance Method: Compliance with this emission limitation shall be demonstrated through the summation of the daily emission rates as calculated in Section A.III.1.i on a calendar basis.

5. Formulation data or 40 CFR Part 60, Appendix A, Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

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>
surface coating operation #6 (Flowcoat Line 2) controlled by a permanent total enclosure and a thermal incinerator		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (R003) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropyl Alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr):12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 52.05

MAGLC (ug/m3): 23,405

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hardcoat Line 2 (R004)

Activity Description: Surface Coating Operation #7, Hardcoat Line 2 with Thermal Oxidizer

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>
surface coating operation #7 (Hardcoat Line 2) controlled by a permanent total enclosure and a thermal oxidizer	OAC rule 3745-31-05(A)(3) (PTI # 01-8354)	The best available technology (BAT) determination for this emissions unit is compliance with the control requirements and emission limitations specified in Sections A.1.2.a-c below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The permittee shall control OC emissions from this emissions unit through the use of a permanent total enclosure(PTE) and a thermal incinerator with a minimum control efficiency of 95%.
- 2.b Organic compound(OC) emissions shall not exceed 8 pounds per hour and 7.3 tons per year.
- 2.c The PTE serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a PTE in Method 204 (40 CFR Part 51, Appendix M) whenever the emissions unit is in operation.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a daily basis for this emissions unit:
 - a. The name and identification number of each coating, as applied.
 - b. The OC content of each coating, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The OC content of each cleanup material, in pounds per gallon.
 - g. The total number of hours the unit is operated.
 - h. The total uncontrolled OC emission rate from all coating and cleanup materials, in pounds (i.e., sum of (b)x(c) of all coatings + sum of (e)x(f) of all cleanup materials).
 - i. The calculated, controlled OC emission rate for all coatings and cleanup materials, in pounds or tons. The controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
 - j. The average hourly controlled OC emission rate, in pounds per hour, i.e., (i)/(g).
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. 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, with any modifications deemed necessary by the permittee.

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

- a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the allowable hourly emission rate. These reports shall be submitted according to the General Terms and Conditions of this permit.
2. The permittee shall also submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly summaries of the following records:
 - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
 - b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
2. Emission Limitation: The permittee shall control OC emissions from this emissions unit through the use of a permanent total enclosure and a thermal incinerator with a minimum control efficiency of 95%.

Applicable Compliance Method: The permittee shall conduct, or have conducted, OC emission testing for this emissions unit to demonstrate compliance with the minimum overall reduction and minimum control efficiency requirements of Section A.I.1 in accordance with the following requirements:

- a. The emission testing shall be conducted approximately 6 months prior to permit expiration.
- b. The following test methods shall be employed to determine the overall control efficiency of the control equipment serving this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 or 25A, and 40 CFR Part 51, Appendix M, Method 204.
- c. The test(s) shall be conducted while this emissions unit is venting OC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

The overall control efficiency of the control equipment serving this emissions unit shall be demonstrated based upon the results of the capture efficiency and control efficiency tests specified above. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 above and OAC rule 3745-21-10. 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.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

3. Emission Limitation: Organic compound emissions shall not exceed 8 pounds per hour.

Applicable Compliance Method: Compliance with this emission limitation shall be demonstrated through the records required pursuant to Section A.III.1.j and the emission testing required pursuant to Section A.V.2.

4. Emission Limitation: Organic compound emissions shall not exceed 7.3 tons per year.

Applicable Compliance Method: Compliance with this emission limitation shall be demonstrated through the summation of the daily emission rates as calculated in Section A.III.1.i on a calendar basis.

5. Formulation data or 40 CFR Part 60, Appendix A, Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

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>
surface coating operation #7 (Hardcoat Line 2) controlled by a permanent total enclosure and a thermal oxidizer		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (R004) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Isopropyl Alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr):8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 130.2

MAGLC (ug/m3): 23,405

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Plaskolite, Inc.**
Facility ID: **01-25-04-0915**

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