

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

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
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.

- [Go to Part III for Emissions Unit P013](#)
- [Go to Part III for Emissions Unit P014](#)
- [Go to Part III for Emissions Unit P015](#)
- [Go to Part III for Emissions Unit P042](#)
- [Go to Part III for Emissions Unit P052](#)
- [Go to Part III for Emissions Unit R001](#)
- [Go to Part III for Emissions Unit R003](#)
- [Go to Part III for Emissions Unit R004](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P013 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

- 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.
- 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.
- 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.
- d. For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
 - 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.
 - 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.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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:
- h. (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.
- 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.
 - 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).
 - 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.
 - 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 depleted. 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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. Miscellaneous Requirements

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P013 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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>
2. Additional Terms and Conditions		
1. None		

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

VI. Miscellaneous Requirements

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P014 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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**

- 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.
- 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.
- 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.
- d. For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
 - 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.
- a. 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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:
 - h. (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.
 - 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.
 - 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).
 - 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.
 - 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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P014 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P015 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

- 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.
- 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.
- 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.
- d. For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.

- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
 - 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.
 - 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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:
 - h.
 - (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.
- 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.
 - 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).
 - 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.
 - 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 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P015 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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>
2. Additional Terms and Conditions			
1.	None		

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P042 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

- 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.
- 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.
- 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.
- d. For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
 - 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.
 - a. 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.
 - 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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:
- h. (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.
- 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.
 - 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).
 - 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.
 - 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 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P042 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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>
2. Additional Terms and Conditions			
1.	None		

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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II. **Operational Restrictions**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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IV. **Reporting Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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V. **Testing Requirements**

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P052 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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**

- 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.
- 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.
- 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.
- d. For the purposes of these terms and conditions, all other definitions can be found in OAC rule 3745-21-01.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.
 - 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.
 - 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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;

- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. Miscellaneous Requirements

1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: P052 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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>
2. Additional Terms and Conditions			
1.	None		

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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II. Operational Restrictions

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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III. Monitoring and/or Record Keeping Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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IV. Reporting Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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V. Testing Requirements

- 1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. Miscellaneous Requirements

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R001 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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). See A.I.2.a.
	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).
	OAC rule 3745-21-07(G)(2)	85% overall reduction, by weight, of the OC emissions.

2. Additional Terms and Conditions

- 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%.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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).

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.
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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

VI. **Miscellaneous Requirements**

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R001 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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		

2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

III. **Monitoring and/or Record Keeping Requirements**

1. 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

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:

- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

VI. Miscellaneous Requirements

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R003 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

- 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%.
- b. Organic compound(OC) emissions shall not exceed 12 pounds per hour and 52.3 tons per year.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R003 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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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surface coating operation #6 (Flowcoat Line 2) controlled by a permanent total enclosure and a thermal incinerator		
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2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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:

- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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VI. Miscellaneous Requirements

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

Part III - Terms and Conditions for Emissions Units

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R004 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

- 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%.
- b. Organic compound(OC) emissions shall not exceed 8 pounds per hour and 7.3 tons per year.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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., (l)/(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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

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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.
- 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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.

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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

VI. **Miscellaneous Requirements**

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0125040915 Issuance type: Title V Proposed Permit

[Go to the top of this document](#)

Facility ID: 0125040915 Emissions Unit ID: R004 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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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surface coating operation #7 (Hardcoat Line 2) controlled by a permanent total enclosure and a thermal oxidizer		
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2. **Additional Terms and Conditions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

II. **Operational Restrictions**

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

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 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.

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

IV. Reporting Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

V. Testing Requirements

1. None

[Go to the top of this document](#)

[Go to the top of Part III for this Emissions Unit](#)

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

VI. Miscellaneous Requirements

1. None