



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LAKE COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 02-13904

DATE: 7/13/00

Ricerca LLC
Michael D Contenza
7528 Auburn Rd
Concord Twp, OH 44077

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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

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

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

Very truly yours,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: July 13, 2000
Effective Date: July 13, 2000**

FINAL PERMIT TO INSTALL 02-13904

Application Number: 02-13904
APS Premise Number: 0243000241
Permit Fee: **\$6200**
Name of Facility: Ricerca LLC
Person to Contact: Michael D Contenza
Address: 7528 Auburn Rd
Concord Twp, OH 44077

Location of proposed air contaminant source(s) [emissions unit(s)]:

**7528 Auburn Rd
Concord Twp, Ohio**

Description of proposed emissions unit(s):

Process development pilot plant.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Ricerca LLC

Facility ID: 0243000241

PTI Application: 02-13904

Issued: July 13, 2000

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be

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made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

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8. Federal and State Enforceability

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

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

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- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

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B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

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

4. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

5. Termination of Permit To Install

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

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

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

7. Public Disclosure

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

8. Applicability

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

9. Best Available Technology

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As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

10. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
organic compounds (OC)	75 TPY

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P007 - Pressure filter, SS, 36 inches, S-12200	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.

2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.

2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

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PTI A

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II. Operational Restrictions

Emissions Unit ID: P007

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P007

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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PTI A

Emissions Unit ID: P007

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3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Ricerc
PTI A

Emissions Unit ID: P007

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P007 - Pressure filter, SS, 36 inches, S-12200	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P007) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P007:

Pollutant: acetic acid

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Emissions Unit ID: P007

TLV (ug/m3): 25000
Maximum Hourly Emission Rate (lbs/hr): 0.8
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 60 (EF45) and 54 (EF76)
MAGLC (ug/m3): 2500

Pollutant: acetone
TLV (ug/m3): 1188000
Maximum Hourly Emission Rate (lbs/hr): 49.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3609 (EF45) and 3258 (EF76)
MAGLC (ug/m3): 118800

Pollutant: acetonitrile
TLV (ug/m3): 67000
Maximum Hourly Emission Rate (lbs/hr): 3.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 238 (EF45) and 215 (EF76)
MAGLC (ug/m3): 6700

Pollutant: cyclohexane
TLV (ug/m3): 1030000
Maximum Hourly Emission Rate (lbs/hr): 7.2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 530 (EF45) and 479 (EF76)
MAGLC (ug/m3): 103000

Pollutant: dimethylformamide
TLV (ug/m3): 30000
Maximum Hourly Emission Rate (lbs/hr): 0.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 19 (EF45) and 17 (EF76)
MAGLC (ug/m3): 3000

Pollutant: ethyl acetate
TLV (ug/m3): 1440000
Maximum Hourly Emission Rate (lbs/hr): 7.2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 523 (EF45) and 473 (EF76)
MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol
TLV (ug/m3): 1880000
Maximum Hourly Emission Rate (lbs/hr): 2.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 175 (EF45) and 158 (EF76)
MAGLC (ug/m3): 188000

Pollutant: heptane
TLV (ug/m3): 1640000

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PTI A

Emissions Unit ID: P007

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Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 291 (EF45) and 262 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 5.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 393 (EF45) and 355 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 2.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 174 (EF45) and 157 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 3.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 258 (EF45) and 233 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13 (EF45) and 11 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 32.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2372 (EF45) and 2141 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 19.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1405 (EF45) and 1269 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 1.4

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Emissions Unit ID: P007

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 105 (EF45) and 95 (EF76)

MAGLC (ug/m3): 1600

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PTI Application: 02-13004

Issued

Facility ID: 0243000241

Emissions Unit ID: P007

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 10.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 743 (EF45) and 670 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 168 (EF45) and 151 (EF76)

MAGLC (ug/m3): 18800

* Emissions unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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":

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Emissions Unit ID: P007

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- 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.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P008 - Perforated basket centrifuge, SS, 32 inches, S-1900	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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PTI Application: 02-13004

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Facility ID: 0243000241

Emissions Unit ID: P008

1. None.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.II.1 and A.II.2 shall be summed to arrive at total annual emissions.

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

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Facility ID: 0243000241

Emissions Unit ID: P008

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P008

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B. State Only Enforceable Section**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P008 - Perforated basket centrifuge, SS, 32 inches, S-1900	None.	None.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P008) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P008:

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Pollutant: acetic acid

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 94 (EF45) and 85 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 18.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1347 (EF45) and 1216 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 5.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 376 (EF45) and 339 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 11.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 836 (EF45) and 755 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30 (EF45) and 27 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 11.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 826 (EF45) and 745 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 3.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 275 (EF45) and 249 (EF76)

MAGLC (ug/m3): 188000

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Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 6.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 458 (EF45) and 414 (EF76)

MAGLC (ug/m3): 164000

Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 8.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620 (EF45) and 560 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 3.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 275 (EF45) and 248 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 5.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 407 (EF45) and 367 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 20 (EF45) and 18 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 29.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2138 (EF45) and 1930 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 30.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2217 (EF45) and 2001 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 165 (EF45) and 149 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 16.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1171 (EF45) and 1057 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 3.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 264 (EF45) and 239 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P009

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P009 - Pressure filter, SS, 36 inches, S-9300	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Issued: July 13, 2000

Emissions Unit ID: P009

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P009

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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Emissions Unit ID: P009

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P009 - Pressure filter, SS, 36 inches, S-9300	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P009) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P009:

Pollutant: acetic acid

Issued: July 13, 2000

TLV (ug/m3): 25000
Maximum Hourly Emission Rate (lbs/hr): 0.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 39 (EF45) and 35 (EF76)
MAGLC (ug/m3): 2500

Pollutant: acetone
TLV (ug/m3): 1188000
Maximum Hourly Emission Rate (lbs/hr): 32.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2409 (EF45) and 2174 (EF76)
MAGLC (ug/m3): 118800

Pollutant: acetonitrile
TLV (ug/m3): 67000
Maximum Hourly Emission Rate (lbs/hr): 2.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 156 (EF45) and 141 (EF76)
MAGLC (ug/m3): 6700

Pollutant: cyclohexane
TLV (ug/m3): 1030000
Maximum Hourly Emission Rate (lbs/hr): 4.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 347 (EF45) and 313 (EF76)
MAGLC (ug/m3): 103000

Pollutant: dimethylformamide
TLV (ug/m3): 30000
Maximum Hourly Emission Rate (lbs/hr): 0.2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12 (EF45) and 11 (EF76)
MAGLC (ug/m3): 3000

Pollutant: ethyl acetate
TLV (ug/m3): 1440000
Maximum Hourly Emission Rate (lbs/hr): 4.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 343 (EF45) and 309 (EF76)
MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol
TLV (ug/m3): 1880000
Maximum Hourly Emission Rate (lbs/hr): 1.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 114 (EF45) and 103 (EF76)
MAGLC (ug/m3): 188000

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Emissions Unit ID: P009

Issued: July 13, 2000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 2.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 190 (EF45) and 172 (EF76)

MAGLC (ug/m3): 164000

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Emissions Unit ID: P009

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 3.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 257 (EF45) and 232 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 1.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 114 (EF45) and 103 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 169 (EF45) and 152 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 8 (EF45) and 7 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 21.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1552 (EF45) and 1401 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 12.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 920 (EF45) and 830 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 69 (EF45) and 62 (EF76)

MAGLC (ug/m3): 1600

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PTI Application: 02-13004

Issued

Facility ID: 0243000241

Emissions Unit ID: P009

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Emissions Unit ID: P009

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 6.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 486 (EF45) and 439 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110 (EF45) and 99 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.

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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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P010 - Pressure filter, SS, 30 inches, S-8400	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:

1. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
2. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
3. the organic compound emission rate for all materials, in pounds per day;
4. the daily operating hours of the emissions unit; and,
5. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:

1. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
2. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
3. the total organic compound emission rate, in pounds per day;
4. the daily operating hours of the emissions unit; and,
5. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P010

4. The permittee shall record annually the OC emissions from emissions from emissions unit P007 through P015, P018 through P020, and P024 through P036.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P010

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P010 - Pressure filter, SS, 30 inches, S-8400	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P010) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P010:

Pollutant: acetic acid

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Emissions Unit ID: P010

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 23 (EF45) and 21 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 19.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1442 (EF45) and 1302 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 93 (EF45) and 84 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 2.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 208 (EF45) and 188 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7 (EF45) and 7 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 2.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 205 (EF45) and 185 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 68 (EF45) and 62 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.6

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 114 (EF45) and 103 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 2.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 154 (EF45) and 139 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 68 (EF45) and 62 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 1.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101 (EF45) and 91 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5 (EF45) and 4 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 12.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 930 (EF45) and 839 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 7.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 551 (EF45) and 497 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 41 (EF45) and 37 (EF76)

MAGLC (ug/m3): 1600

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Facility ID: 0243000241

Emissions Unit ID: P010

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 291 (EF45) and 263 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 66 (EF45) and 59 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P011 - Vacuum shelf dryer, 48 square feet, D-1500	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a** On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b** On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c** The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Facility ID: 0243000241

Emissions Unit ID: P011

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.
5. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall collect and record the weight of carbon before and after each batch.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio

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Issued

Facility ID: 0243000241

Emissions Unit ID: P011

EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed
Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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PTI A

Emissions Unit ID: P011

Issued: July 13, 2000

B. State Only Enforceable Section**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P011 - Vacuum shelf dryer, 48 square feet, D-1500	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P011) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P011:

Pollutant: acetone

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TLV (ug/m3): 1188000
Maximum Hourly Emission Rate (lbs/hr): 1.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 126 (EF45) and 114 (EF76)
MAGLC (ug/m3): 118800

Pollutant: acetonitrile
TLV (ug/m3): 67000
Maximum Hourly Emission Rate (lbs/hr): 0.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 34 (EF45) and 30 (EF76)
MAGLC (ug/m3): 6700

Pollutant: cyclohexane
TLV (ug/m3): 1030000
Maximum Hourly Emission Rate (lbs/hr): 1.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 73 (EF45) and 66 (EF76)
MAGLC (ug/m3): 103000

Pollutant: dimethylformamide
TLV (ug/m3): 30000
Maximum Hourly Emission Rate (lbs/hr): 0.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2 (EF45) and 2 (EF76)
MAGLC (ug/m3): 3000

Pollutant: ethyl acetate
TLV (ug/m3): 1440000
Maximum Hourly Emission Rate (lbs/hr): 0.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 68 (EF45) and 61 (EF76)
MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol
TLV (ug/m3): 1880000
Maximum Hourly Emission Rate (lbs/hr): 0.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 19 (EF45) and 17 (EF76)
MAGLC (ug/m3): 188000

Pollutant: heptane
TLV (ug/m3): 1640000
Maximum Hourly Emission Rate (lbs/hr): 0.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37 (EF45) and 33 (EF76)
MAGLC (ug/m3): 164000

Pollutant: isopropyl alcohol
TLV (ug/m3): 983000
Maximum Hourly Emission Rate (lbs/hr): 0.2

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17 (EF45) and 16 (EF76)

MAGLC (ug/m3): 98300

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Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31 (EF45) and 28 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1 (EF45) and 1 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 5.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 373 (EF45) and 337 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 2.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 215 (EF45) and 194 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 12 (EF45) and 11 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 107 (EF45) and 97 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 21 (EF45) and 19 (EF76)

MAGLC (ug/m3): 18800

* Emissions unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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

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show the results of the application of the "Air Toxic Policy" for the change.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P012 - Slant cone rotary dryer, 10 cubic feet, D-2000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.
5. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall collect and record the weight of carbon before and after each batch.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information: for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P012 - Slant cone rotary dryer, 10 cubic feet, D-2000	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P012) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P012:

Pollutant: acetone

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TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 169 (EF45) and 152 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 40 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 97 (EF45) and 88 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2 (EF45) and 2 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 1.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 91 (EF45) and 82 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 25 (EF45) and 22 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49 (EF45) and 44 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23 (EF45) and 21 (EF76)

MAGLC (ug/m3): 98300

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Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42 (EF45) and 38 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1 (EF45) and 1 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 6.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 497 (EF45) and 449 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 3.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 286 (EF45) and 258 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16 (EF45) and 14 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 143 (EF45) and 129 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27 (EF45) and 25 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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

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show the results of the application of the "Air Toxic Policy" for the change.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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PTI A

Emissions Unit ID: P013

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P013 - Double cone rotary dryer, 20 cubic feet, D-12000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Emissions Unit ID: P013

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.
5. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall collect and record the weight of carbon before and after each batch.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 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>
P013 - Double cone rotary dryer, 20 cubic feet, D-12000	None.	None.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

- 1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P013) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P013:

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 4.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 337 (EF45) and 304 (EF76)

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MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 1.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 90 (EF45) and 81 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 2.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 194 (EF45) and 175 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5 (EF45) and 4 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 2.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 181 (EF45) and 164 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 50 (EF45) and 45 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 98 (EF45) and 89 (EF76)

MAGLC (ug/m3): 164000

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.6

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 47 (EF45) and 42 (EF76)

MAGLC (ug/m3): 98300

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Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 1.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83 (EF45) and 75 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3 (EF45) and 2 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 13.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 995 (EF45) and 898 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 7.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 573 (EF45) and 517 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32 (EF45) and 29 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 3.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 287 (EF45) and 259 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55 (EF45) and 50 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each

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pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P014 - Vacuum shelf dryer, 183.3 square feet, D-13000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-31-28	None. See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

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- 2.d** This emissions unit is exempt from the requirements of OAC rule 3745-31-28 pursuant to the exemption in OAC rule 3745-31-28(C)(5) for any major MACT source that is a research and development activity.

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II. Operational Restrictions

1. None.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.
4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.
5. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall collect and record the weight of carbon before and after each batch.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by

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performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. When carbon adsorption is employed as a means to reduce organic compound emissions, the permittee shall determine the quantity of organic compound adsorbed onto the carbon and subtract that quantity from the organic compound emissions determined based upon material balance. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P014 - Vacuum shelf dryer, 183.3 square feet, D-13000	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P014) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P014:

Pollutant: acetone

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TLV (ug/m3): 1188000
Maximum Hourly Emission Rate (lbs/hr): 7.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 513 (EF45) and 463 (EF76)
MAGLC (ug/m3): 118800

Pollutant: acetonitrile
TLV (ug/m3): 67000
Maximum Hourly Emission Rate (lbs/hr): 1.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136 (EF45) and 123 (EF76)
MAGLC (ug/m3): 6700

Pollutant: cyclohexane
TLV (ug/m3): 1030000
Maximum Hourly Emission Rate (lbs/hr): 4.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 295 (EF45) and 267 (EF76)
MAGLC (ug/m3): 103000

Pollutant: dimethylformamide
TLV (ug/m3): 30000
Maximum Hourly Emission Rate (lbs/hr): 0.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7 (EF45) and 7 (EF76)
MAGLC (ug/m3): 3000

Pollutant: ethyl acetate
TLV (ug/m3): 1440000
Maximum Hourly Emission Rate (lbs/hr): 3.8
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 276 (EF45) and 249 (EF76)
MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol
TLV (ug/m3): 1880000
Maximum Hourly Emission Rate (lbs/hr): 1.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 76 (EF45) and 68 (EF76)
MAGLC (ug/m3): 188000

Pollutant: heptane
TLV (ug/m3): 1640000
Maximum Hourly Emission Rate (lbs/hr): 2.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 149 (EF45) and 135 (EF76)
MAGLC (ug/m3): 164000

Pollutant: isopropyl alcohol
TLV (ug/m3): 983000
Maximum Hourly Emission Rate (lbs/hr): 1.0

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71 (EF45) and 64 (EF76)

MAGLC (ug/m3): 98300

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Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 1.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 127 (EF45) and 115 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 4 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 20.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1513 (EF45) and 1365 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 11.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 871 (EF45) and 786 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49 (EF45) and 44 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 436 (EF45) and 393 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 1.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83 (EF45) and 75 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each

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pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P015 - 100 gallon GLS reaction system, R-100	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3)	See A.I.2.a below. See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Emissions Unit ID: P015

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P015

Issued: July 13, 2000

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

Issued: July 13, 2000

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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Emissions Unit ID: P015

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P015 - 100 gallon GLS reaction system, R-100	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P018 - 50 gallon Ni-clad reaction system, R-400	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Facility ID: 0243000241

Emissions Unit ID: P018

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Section A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P018

Issued: July 13, 2000

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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Emissions Unit ID: P018

in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions unit P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 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>
P018 - 50 gallon Ni-clad reaction system, R-400	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P019 - 50 gallon GLS reaction system, R-500	OAC <i>rule</i> 3745-21-07(G)(2) OAC <i>rule</i> 3745-31-05(A)(3)	See A.I.2.a below. See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Issued: July 13, 2000

Emissions Unit ID: P019

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Section A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Issued

Facility ID: 0243000241

Emissions Unit ID: P019

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

Issued: July 13, 2000

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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Emissions Unit ID: P019

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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PTI A

Emissions Unit ID: P019

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P019 - 50 gallon GLS reaction system, R-500	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P020 - 200 gallon GLS reaction system, R-600	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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PTI A

Issued: July 13, 2000

Emissions Unit ID: P020

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Issued

Facility ID: 0243000241

Emissions Unit ID: P020

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

Issued: July 13, 2000

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P020 - 200 gallon GLS reaction system, R-600	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Ricerc

PTI A

Emissions Unit ID: P024

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P024 - 500 gallon GLS reaction system, R-1000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Ricerc

PTI A

Issued: July 13, 2000

Emissions Unit ID: P024

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

Emissions Unit ID: P024

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P024 - 500 gallon GLS reaction system, R-1000	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

1. This emissions unit shall be connected to one of the wet scrubbers, S-3100, S-3200, or S-11000, when reactive organic compounds and/or acid gases are being emitted or when odors are generated to minimize or reduce nuisance odors.
2. When using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine in the emissions unit, a scrubber shall be employed. The pH of the scrubber liquor shall be maintained at a pH of 10 or greater when using chlorine, hydrogen chloride, and/or hydrogen bromide. The pH of the scrubber liquor will be maintained at a pH of 3 or less when using t-butylamine.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P024) was evaluated based on the actual materials (typically coatings and cleanup 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

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potentially 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 each of the potential pollutants discharges from P024:

Pollutant: acetic acid

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 1.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 124 (EF45) and 112 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 24.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1769 (EF45) and 1597 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 6.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 494 (EF45) and 446 (EF76)

MAGLC (ug/m3): 6700

Pollutant: t-butylamine

TLV (ug/m3): 11000

Maximum Hourly Emission Rate (lbs/hr): 0.05

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 1100

Pollutant: chlorine

TLV (ug/m3): 1450

Maximum Hourly Emission Rate (lbs/hr): 0.13

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 10 (EF45) and 9 (EF76)

MAGLC (ug/m3): 145

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 15.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1098 (EF45) and 991 (EF76)

MAGLC (ug/m3): 103000

Pollutant: diethyl ether

TLV (ug/m3): 1210000

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Maximum Hourly Emission Rate (lbs/hr): 71.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5267 (EF45) and 4754 (EF76)

MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39 (EF45) and 35 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 14.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1085 (EF45) and 979 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362 (EF45) and 327 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 8.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 602 (EF45) and 544 (EF76)

MAGLC (ug/m3): 164000

Pollutant: hydrogen bromide

TLV (ug/m3): 7300

Maximum Hourly Emission Rate (lbs/hr): 1.28

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 94 (EF45) and 85 (EF76)

MAGLC (ug/m3): 730

Pollutant: hydrogen chloride

TLV (ug/m3): 5500

Maximum Hourly Emission Rate (lbs/hr): 0.15

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11 (EF45) and 10 (EF76)

MAGLC (ug/m3): 550

Pollutant: isopropyl acetate

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TLV (ug/m3): 1044000
Maximum Hourly Emission Rate (lbs/hr): 11.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 815 (EF45) and 736 (EF76)
MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol
TLV (ug/m3): 983000
Maximum Hourly Emission Rate (lbs/hr): 4.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 361 (EF45) and 326 (EF76)
MAGLC (ug/m3): 98300

Pollutant: methyl alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 7.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 535 (EF45) and 483 (EF76)
MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol
TLV (ug/m3): 104000
Maximum Hourly Emission Rate (lbs/hr): 0.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 26 (EF45) and 23 (EF76)
MAGLC (ug/m3): 10400

Pollutant: methylene chloride
TLV (ug/m3): 174000
Maximum Hourly Emission Rate (lbs/hr): 35.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2598 (EF45) and 2345 (EF76)
MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether
TLV (ug/m3): 144000
Maximum Hourly Emission Rate (lbs/hr): 20.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1506 (EF45) and 1359 (EF76)
MAGLC (ug/m3): 14400

Pollutant: pyridine
TLV (ug/m3): 16000
Maximum Hourly Emission Rate (lbs/hr): 3.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 217 (EF45) and 196 (EF76)
MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran
TLV (ug/m3): 590000
Maximum Hourly Emission Rate (lbs/hr): 21.0

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1538 (EF45) and 1389 (EF76)
MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 4.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 347 (EF45) and 313 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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":

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- 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".
 3. The permittee shall sample, measure, and monitor the pH of the scrubber liquor while the emissions unit is in operation using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine. The pH will be measured using a pH meter that is operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information when the emissions unit is being operated using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine:

- a. The pH of the scrubber liquor, on a daily basis.
- b. A log or record of operating time for the emissions unit and the scrubber.

IV. Reporting Requirements

1. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P025 - 100 gallon GLS reaction system, R-1300	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P025 - 100 gallon GLS reaction system, R-1300	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

1. This emissions unit shall be connected to one of the wet scrubbers, S-3100, S-3200, or S-11000, when reactive organic compounds and/or acid gases are being emitted or when odors are generated to minimize or reduce nuisance odors.
2. When using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine in the emissions unit, a scrubber shall be employed. The pH of the scrubber liquor shall be maintained at a pH of 10 or greater when using chlorine, hydrogen chloride, and/or hydrogen bromide. The pH of the scrubber liquor will be maintained at a pH of 3 or less when using t-butylamine.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P025) was evaluated based on the actual materials (typically coatings and cleanup 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

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potentially 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 each of the potential pollutants discharges from P025:

Pollutant: acetic acid

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 33 (EF45) and 30 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 6.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 475 (EF45) and 429 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 1.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133 (EF45) and 120 (EF76)

MAGLC (ug/m3): 6700

Pollutant: t-butylamine

TLV (ug/m3): 11000

Maximum Hourly Emission Rate (lbs/hr): 0.05

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 1100

Pollutant: chlorine

TLV (ug/m3): 1450

Maximum Hourly Emission Rate (lbs/hr): 0.026

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2 (EF45) and 2 (EF76)

MAGLC (ug/m3): 145

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 295 (EF45) and 266 (EF76)

MAGLC (ug/m3): 103000

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Pollutant: diethyl ether

TLV (ug/m3): 1210000

Maximum Hourly Emission Rate (lbs/hr): 19.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1413 (EF45) and 1276 (EF76)

MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11 (EF45) and 10 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 291 (EF45) and 263 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 97 (EF45) and 88 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 2.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 162 (EF45) and 146 (EF76)

MAGLC (ug/m3): 164000

Pollutant: hydrogen bromide

TLV (ug/m3): 7300

Maximum Hourly Emission Rate (lbs/hr): 0.26

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 19 (EF45) and 17 (EF76)

MAGLC (ug/m3): 730

Pollutant: hydrogen chloride

TLV (ug/m3): 5500

Maximum Hourly Emission Rate (lbs/hr): 0.03

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2 (EF45) and 2 (EF76)

MAGLC (ug/m3): 550

Pollutant: isopropyl acetate

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TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 219 (EF45) and 197 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 97 (EF45) and 87 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 143 (EF45) and 130 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7 (EF45) and 6 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 9.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 697 (EF45) and 629 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 5.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 404 (EF45) and 365 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 58 (EF45) and 53 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 5.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 413 (EF45) and 373 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 1.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 93 (EF45) and 84 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".
3. The permittee shall sample, measure, and monitor the pH of the scrubber liquor while the emissions unit is in operation using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine. The pH will be measured using a pH meter that is operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information when the emissions unit is being operated using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine:

- a. The pH of the scrubber liquor, on a daily basis.
- b. A log or record of operating time for the emissions unit and the scrubber.

IV. Reporting Requirements

1. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P026 - 500 gallon GLS reaction system, R-1400	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Facility ID: 0243000241

Emissions Unit ID: P026

1. None.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be

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summed to arrive at total annual emissions.

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

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Facility ID: 0243000241

Emissions Unit ID: P026

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P026 - 500 gallon GLS reaction system, R-1400	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P026) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P026:

Pollutant: acetic acid

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TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 1.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 124 (EF45) and 112 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 24.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1769 (EF45) and 1597 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 6.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 494 (EF45) and 446 (EF76)

MAGLC (ug/m3): 6700

Pollutant: t-butylamine

TLV (ug/m3): 11000

Maximum Hourly Emission Rate (lbs/hr): 0.05

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 1100

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 15.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1098 (EF45) and 991 (EF76)

MAGLC (ug/m3): 103000

Pollutant: diethyl ether

TLV (ug/m3): 1210000

Maximum Hourly Emission Rate (lbs/hr): 71.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5267 (EF45) and 4754 (EF76)

MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39 (EF45) and 35 (EF76)

MAGLC (ug/m3): 3000

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Ricerca LLC

PTI Application: 02-13004

Issued

Facility ID: 0243000241

Emissions Unit ID: P026

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 14.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1085 (EF45) and 979 (EF76)

MAGLC (ug/m3): 144000

Ricerc**PTI A**

Emissions Unit ID: P026

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Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362 (EF45) and 327 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 8.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 602 (EF45) and 544 (EF76)

MAGLC (ug/m3): 164000

Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 11.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 815 (EF45) and 736 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 361 (EF45) and 326 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 7.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 535 (EF45) and 483 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 26 (EF45) and 23 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 35.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2598 (EF45) and 2345 (EF76)

MAGLC (ug/m3): 17400

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Emissions Unit ID: P026

Ricerca**PTI A**

Emissions Unit ID: P026

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Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 20.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1506 (EF45) and 1359 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 217 (EF45) and 196 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 21.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1538 (EF45) and 1389 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 4.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 347 (EF45) and 313 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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

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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.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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Ricerca LLC

PTI Application: 02-13004

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Facility ID: 0243000241

Emissions Unit ID: P026

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P027 - 750 gallon SS reaction system, R-8300	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Ricerc

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Issued: July 13, 2000

Emissions Unit ID: P027

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P027

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Ricerc
PTI A

Emissions Unit ID: P027

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P027 - 750 gallon SS reaction system, R-8300	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P027) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P027:

Pollutant: acetic acid

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Emissions Unit ID: P027

TLV (ug/m3): 25000
Maximum Hourly Emission Rate (lbs/hr): 2.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 157 (EF45) and 142 (EF76)
MAGLC (ug/m3): 2500

Pollutant: acetone
TLV (ug/m3): 1188000
Maximum Hourly Emission Rate (lbs/hr): 30.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2244 (EF45) and 2026 (EF76)
MAGLC (ug/m3): 118800

Pollutant: acetonitrile
TLV (ug/m3): 67000
Maximum Hourly Emission Rate (lbs/hr): 8.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 626 (EF45) and 566 (EF76)
MAGLC (ug/m3): 6700

Pollutant: t-butylamine
TLV (ug/m3): 11000
Maximum Hourly Emission Rate (lbs/hr): 0.05
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)
MAGLC (ug/m3): 1100

Pollutant: cyclohexane
TLV (ug/m3): 1030000
Maximum Hourly Emission Rate (lbs/hr): 19.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1393 (EF45) and 1257 (EF76)
MAGLC (ug/m3): 103000

Pollutant: diethyl ether
TLV (ug/m3): 1210000
Maximum Hourly Emission Rate (lbs/hr): 91.2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6680 (EF45) and 6030 (EF76)
MAGLC (ug/m3): 121000

Pollutant: dimethylformamide
TLV (ug/m3): 30000
Maximum Hourly Emission Rate (lbs/hr): 0.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 50 (EF45) and 45 (EF76)
MAGLC (ug/m3): 3000

Pollutant: ethyl acetate
TLV (ug/m3): 1440000
Maximum Hourly Emission Rate (lbs/hr): 18.8

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1376 (EF45) and 1242 (EF76)

MAGLC (ug/m3): 144000

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Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 6.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 459 (EF45) and 414 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 8.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 602 (EF45) and 544 (EF76)

MAGLC (ug/m3): 164000

Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 14.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1033 (EF45) and 933 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 6.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 457 (EF45) and 413 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 9.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 678 (EF45) and 612 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 33 (EF45) and 30 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 45.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3295 (EF45) and 2974 (EF76)

MAGLC (ug/m3): 17400

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Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 26.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1910 (EF45) and 1724 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 3.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 275 (EF45) and 249 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 26.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1951 (EF45) and 1762 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 440 (EF45) and 397 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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

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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.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P028 - 500 gallon GLS reaction system, R-10000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P028 - 500 gallon GLS reaction system, R-10000	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

1. This emissions unit shall be connected to one of the wet scrubbers, S-3100, S-3200, or S-11000, when reactive organic compounds and/or acid gases are being emitted or when odors are generated to minimize or reduce nuisance odors.
2. When using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine in the emissions unit, a scrubber shall be employed. The pH of the scrubber liquor shall be maintained at a pH of 10 or greater when using chlorine, hydrogen chloride, and/or hydrogen bromide. The pH of the scrubber liquor will be maintained at a pH of 3 or less when using t-butylamine.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P028) was evaluated based on the actual materials (typically coatings and cleanup 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

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potentially 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 each of the potential pollutants discharges from P028:

Pollutant: acetic acid

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 1.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 124 (EF45) and 112 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 24.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1769 (EF45) and 1597 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 6.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 494 (EF45) and 446 (EF76)

MAGLC (ug/m3): 6700

Pollutant: t-butylamine

TLV (ug/m3): 11000

Maximum Hourly Emission Rate (lbs/hr): 0.05

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 1100

Pollutant: chlorine

TLV (ug/m3): 1450

Maximum Hourly Emission Rate (lbs/hr): 0.13

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 10 (EF45) and 9 (EF76)

MAGLC (ug/m3): 145

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 15.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1098 (EF45) and 991 (EF76)

MAGLC (ug/m3): 103000

Pollutant: diethyl ether

TLV (ug/m3): 1210000

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Maximum Hourly Emission Rate (lbs/hr): 71.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5267 (EF45) and 4754 (EF76)

MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39 (EF45) and 35 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 14.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1085 (EF45) and 979 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362 (EF45) and 327 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 8.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 602 (EF45) and 544 (EF76)

MAGLC (ug/m3): 164000

Pollutant: hydrogen bromide

TLV (ug/m3): 7300

Maximum Hourly Emission Rate (lbs/hr): 1.28

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 94 (EF45) and 85 (EF76)

MAGLC (ug/m3): 730

Pollutant: hydrogen chloride

TLV (ug/m3): 5500

Maximum Hourly Emission Rate (lbs/hr): 0.15

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11 (EF45) and 10 (EF76)

MAGLC (ug/m3): 550

Pollutant: isopropyl acetate

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TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 11.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 815 (EF45) and 736 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 361 (EF45) and 326 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 7.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 535 (EF45) and 483 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 26 (EF45) and 23 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 35.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2598 (EF45) and 2345 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 20.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1506 (EF45) and 1359 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 217 (EF45) and 196 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 21.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1538 (EF45) and 1389 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 4.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 347 (EF45) and 313 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".
 3. The permittee shall sample, measure, and monitor the pH of the scrubber liquor while the emissions unit is in operation using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine. The pH will be measured using a pH meter that is operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information when the emissions unit is being operated using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine:

- a. The pH of the scrubber liquor, on a daily basis.
- b. A log or record of operating time for the emissions unit and the scrubber.

IV. Reporting Requirements

1. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P029 - 500 gallon GLS reaction system, R-17000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-31-28	None. See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.
- 2.d This emissions unit is exempt from the requirements of OAC rule 3745-31-28 pursuant to the exemption in OAC rule 3745-31-28(C)(5) for any major MACT source that is a research and development activity.

II. Operational Restrictions

1. None.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,

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- e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.
 4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P029 - 500 gallon GLS reaction system, R-17000	None.	None.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

1. This emissions unit shall be connected to one of the wet scrubbers, S-3100, S-3200, or S-11000, when reactive organic compounds and/or acid gases are being emitted or when odors are generated to minimize or reduce nuisance odors.
2. When using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine in the emissions unit, a scrubber shall be employed. The pH of the scrubber liquor shall be maintained at a pH of 10 or greater when using chlorine, hydrogen chloride, and/or hydrogen bromide. The pH of the scrubber liquor will be maintained at a pH of 3 or less when using t-butylamine.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P029) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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

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results of the modeling for each of the potential pollutants discharges from P029:

Pollutant: acetic acid

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 1.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 124 (EF45) and 112 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 24.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1769 (EF45) and 1597 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 6.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 494 (EF45) and 446 (EF76)

MAGLC (ug/m3): 6700

Pollutant: t-butylamine

TLV (ug/m3): 11000

Maximum Hourly Emission Rate (lbs/hr): 0.05

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 1100

Pollutant: chlorine

TLV (ug/m3): 1450

Maximum Hourly Emission Rate (lbs/hr): 0.13

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 10 (EF45) and 9 (EF76)

MAGLC (ug/m3): 145

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 15.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1098 (EF45) and 991 (EF76)

MAGLC (ug/m3): 103000

Pollutant: diethyl ether

TLV (ug/m3): 1210000

Maximum Hourly Emission Rate (lbs/hr): 71.9

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5267 (EF45) and 4754 (EF76)
MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39 (EF45) and 35 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 14.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1085 (EF45) and 979 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362 (EF45) and 327 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 8.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 602 (EF45) and 544 (EF76)

MAGLC (ug/m3): 164000

Pollutant: hydrogen bromide

TLV (ug/m3): 7300

Maximum Hourly Emission Rate (lbs/hr): 1.28

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 94 (EF45) and 85 (EF76)

MAGLC (ug/m3): 730

Pollutant: hydrogen chloride

TLV (ug/m3): 5500

Maximum Hourly Emission Rate (lbs/hr): 0.15

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11 (EF45) and 10 (EF76)

MAGLC (ug/m3): 550

Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

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Maximum Hourly Emission Rate (lbs/hr): 11.1
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 815 (EF45) and 736 (EF76)
MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol
TLV (ug/m3): 983000
Maximum Hourly Emission Rate (lbs/hr): 4.9
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 361 (EF45) and 326 (EF76)
MAGLC (ug/m3): 98300

Pollutant: methyl alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 7.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 535 (EF45) and 483 (EF76)
MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol
TLV (ug/m3): 104000
Maximum Hourly Emission Rate (lbs/hr): 0.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 26 (EF45) and 23 (EF76)
MAGLC (ug/m3): 10400

Pollutant: methylene chloride
TLV (ug/m3): 174000
Maximum Hourly Emission Rate (lbs/hr): 35.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2598 (EF45) and 2345 (EF76)
MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether
TLV (ug/m3): 144000
Maximum Hourly Emission Rate (lbs/hr): 20.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1506 (EF45) and 1359 (EF76)
MAGLC (ug/m3): 14400

Pollutant: pyridine
TLV (ug/m3): 16000
Maximum Hourly Emission Rate (lbs/hr): 3.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 217 (EF45) and 196 (EF76)
MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran
TLV (ug/m3): 590000
Maximum Hourly Emission Rate (lbs/hr): 21.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1538 (EF45) and 1389 (EF76)

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MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 4.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 347 (EF45) and 313 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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":

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- 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".
3. The permittee shall sample, measure, and monitor the pH of the scrubber liquor while the emissions unit is in operation using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine. The pH will be measured using a pH meter that is operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information when the emissions unit is being operated using chlorine, hydrogen chloride, hydrogen bromide, and/or t-butylamine:

- a. The pH of the scrubber liquor, on a daily basis.
- b. A log or record of operating time for the emissions unit and the scrubber.

IV. Reporting Requirements

1. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P030 - LUWA wiped/thin film evaporator, 1.4 square feet	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3)	See A.I.2.a below. See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P030 - LUWA wiped/thin film evaporator, 1.4 square feet	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P030) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P030:

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Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 3.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 255 (EF45) and 230 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71 (EF45) and ~~664~~ 64 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 2.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 158 (EF45) and 143 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6 (EF45) and 5 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 2.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 156 (EF45) and 141 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52 (EF45) and 47 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87 (EF45) and 78 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 1.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 117 (EF45) and 106 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52 (EF45) and 47 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 1.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 ~~77~~ (EF45) and 3 ~~70~~ (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 3 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 9.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 708 (EF45) and 639 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 419 (EF45) and 379 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31 (EF45) and 28 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 222 (EF45) and 200 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 50 (EF45) and 45 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.

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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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P031 - 2000 gallon <i>process</i> tank, T-2200	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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Emissions Unit ID: P031

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P031

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P031 - 2000 gallon <i>process</i> tank, T-2200	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P031) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P031:

Pollutant: acetic acid

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TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 2.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 157 (EF45) and 142 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 30.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2244 (EF45) and 2026 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 8.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 626 (EF45) and 566 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 19.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1393 (EF45) and 1257 (EF76)

MAGLC (ug/m3): 103000

Pollutant: diethyl ether

TLV (ug/m3): 1210000

Maximum Hourly Emission Rate (lbs/hr): 91.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6680 (EF45) and 6030 (EF76)

MAGLC (ug/m3): 121000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 50 (EF45) and 45 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 18.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1376 (EF45) and 1242 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 6.3

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 459 (EF45) and 414 (EF76)

MAGLC (ug/m3): 188000

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Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 10.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 764 (EF45) and 689 (EF76)

MAGLC (ug/m3): 164000

Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 14.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1033 (EF45) and 933 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 6.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 457 (EF45) and 413 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 9.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 678 (EF45) and 612 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 33 (EF45) and 30 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 45.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3295 (EF45) and 2974 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 26.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1910 (EF45) and 1724 (EF76)

MAGLC (ug/m3): 14400

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Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 3.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 275 (EF45) and 249 (EF76)

MAGLC (ug/m3): 1600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 26.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1951 (EF45) and 1762 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 440 (EF45) and 397 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.).

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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.

2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P032

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
P032 - Perforated basket filter, SS, 24 inches, S-3900	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P032 - Perforated basket filter, SS, 24 inches, S-3900	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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1. The specific operations(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 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>
P033 - Pressure filter, SS, 24 inches, S-7000	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Emissions Unit ID: P033

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P033 - Pressure filter, SS, 24 inches, S-7000	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P033) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P033:

Pollutant: acetic acid

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TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 15 (EF45) and 14 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 12.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 937 (EF45) and 846 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 0.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 61 (EF45) and 55 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 1.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136 (EF45) and 123 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5 (EF45) and 4 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 1.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 134 (EF45) and 121 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 40 (EF76)

MAGLC (ug/m3): 188000

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Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 74 (EF45) and 67 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 1.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101 (EF45) and 91 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 40 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 66 (EF45) and 60 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3 (EF45) and 3 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 8.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 608 (EF45) and 549 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 360 (EF45) and 325 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27 (EF45) and 24 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 2.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 190 (EF45) and 172 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 43 (EF45) and 39 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: P034

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P034 - Pressure filter GLS, 24 inches, S-7100	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3)	See A.I.2.a below. See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Emissions Unit ID: P034

1. None.

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III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P034 - Pressure filter GLS, 24 inches, S-7100	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P034) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P034:

Pollutant: acetic acid
 TLV (ug/m3): 25000
 Maximum Hourly Emission Rate (lbs/hr): 0.2
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 16 (EF45) and 14 (EF76)
 MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 13.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 966 (EF45) and 872 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63 (EF45) and 56 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 1.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 139 (EF45) and 126 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5 (EF45) and 4 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 1.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 137 (EF45) and 124 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46 (EF45) and 41 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 76 (EF45) and 69 (EF76)

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MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 1.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 103 (EF45) and 93 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46 (EF45) and 41 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 68 (EF45) and 61 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3 (EF45) and 3 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 8.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 622 (EF45) and 562 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 5.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 369 (EF45) and 333 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27 (EF45) and 25 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 2.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 195 (EF45) and 176 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 44 (EF45) and 40 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.

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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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P035 - Pressure filter, SS, 24 inches, S-14600	OAC rule 3745-21-07(G)(2)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3)	See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

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4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required

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in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

Ricerc
PTI A

Emissions Unit ID: P035

Issued: July 13, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P035 - Pressure filter, SS, 24 inches, S-14600	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Compliance with the Ohio EPA Air Toxic Policy

Air Toxic Modeling

The permit to install for this emissions unit (P035) was evaluated based on the actual materials (typically coatings and cleanup 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 potentially 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 each of the potential pollutants discharges from P035:

Pollutant: acetic acid

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Emissions Unit ID: P035

TLV (ug/m3): 25000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3)*: 15 (EF45) and 14 (EF76)

MAGLC (ug/m3): 2500

Pollutant: acetone

TLV (ug/m3): 1188000

Maximum Hourly Emission Rate (lbs/hr): 12.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 937 (EF45) and 846 (EF76)

MAGLC (ug/m3): 118800

Pollutant: acetonitrile

TLV (ug/m3): 67000

Maximum Hourly Emission Rate (lbs/hr): 0.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 61 (EF45) and 55 (EF76)

MAGLC (ug/m3): 6700

Pollutant: cyclohexane

TLV (ug/m3): 1030000

Maximum Hourly Emission Rate (lbs/hr): 1.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136 (EF45) and 123 (EF76)

MAGLC (ug/m3): 103000

Pollutant: dimethylformamide

TLV (ug/m3): 30000

Maximum Hourly Emission Rate (lbs/hr): 0.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5 (EF45) and 4 (EF76)

MAGLC (ug/m3): 3000

Pollutant: ethyl acetate

TLV (ug/m3): 1440000

Maximum Hourly Emission Rate (lbs/hr): 1.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 134 (EF45) and 121 (EF76)

MAGLC (ug/m3): 144000

Pollutant: ethyl alcohol

TLV (ug/m3): 1880000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 40 (EF76)

MAGLC (ug/m3): 188000

Pollutant: heptane

TLV (ug/m3): 1640000

Maximum Hourly Emission Rate (lbs/hr): 1.0

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 74 (EF45) and 67 (EF76)

MAGLC (ug/m3): 164000

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Pollutant: isopropyl acetate

TLV (ug/m3): 1044000

Maximum Hourly Emission Rate (lbs/hr): 1.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101 (EF45) and 91 (EF76)

MAGLC (ug/m3): 104400

Pollutant: isopropyl alcohol

TLV (ug/m3): 983000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 40 (EF76)

MAGLC (ug/m3): 98300

Pollutant: methyl alcohol

TLV (ug/m3): 262000

Maximum Hourly Emission Rate (lbs/hr): 0.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 66 (EF45) and 60 (EF76)

MAGLC (ug/m3): 26200

Pollutant: methylamyl alcohol

TLV (ug/m3): 104000

Maximum Hourly Emission Rate (lbs/hr): 0.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3 (EF45) and 3 (EF76)

MAGLC (ug/m3): 10400

Pollutant: methylene chloride

TLV (ug/m3): 174000

Maximum Hourly Emission Rate (lbs/hr): 8.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 608 (EF45) and 549 (EF76)

MAGLC (ug/m3): 17400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144000

Maximum Hourly Emission Rate (lbs/hr): 4.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 360 (EF45) and 325 (EF76)

MAGLC (ug/m3): 14400

Pollutant: pyridine

TLV (ug/m3): 16000

Maximum Hourly Emission Rate (lbs/hr): 0.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27 (EF45) and 24 (EF76)

MAGLC (ug/m3): 1600

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Pollutant: tetrahydrofuran

TLV (ug/m3): 590000

Maximum Hourly Emission Rate (lbs/hr): 2.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 190 (EF45) and 172 (EF76)

MAGLC (ug/m3): 59000

Pollutant: toluene

TLV (ug/m3): 188000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 43 (EF45) and 39 (EF76)

MAGLC (ug/m3): 18800

* Emission unit will discharge through either egress point EF45 or EF76, but not both simultaneously.

Physical changes to or changes in the method of operation of the emissions unit after its installation 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 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 (typically coatings or cleanup materials), 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.

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Ricerca LLC

PTI Application: 02-13004

Issued

Facility ID: 0243000241

Emissions Unit ID: P035

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Emissions Unit ID: P035

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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.
2. The permittee shall sum the predicted 1-hour maximum ground-level concentrations for each pollutant from emissions units P007 through P015, P018 through P020, and P024 through P036 to demonstrate compliance with the "Air Toxic Policy". This sum will take into account the actual equipment's operating schedule and equipment utilization. Comparison to the MAGLC will be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Issued: July 13, 2000

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P036 - Four cavity bag filter, S-9400	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3)	See A.I.2.a below. See A.I.2.b and A.I.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- 2.a On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day nor more than 8 (eight) pounds per hour of organic compounds as defined in OAC rule 3745-21-01. Emissions of organic materials from cleanup with photochemically reactive materials shall be included in the determination of actual emissions when determining compliance with the 8 pounds per hour and 40 pounds per day limits.
- 2.b On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01, are not employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.
- 2.c The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P036 shall be limited to 75 (seventy five) tons per year.

II. Operational Restrictions

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Issued: July 13, 2000

Emissions Unit ID: P036

1. None.

Issued: July 13, 2000

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day that the emissions unit is used for employing, applying, evaporating, or drying photochemically reactive materials:
 - a. the company identification for each organic compound used in the emissions unit, including those used for cleanup;
 - b. the total amount of organic compounds used in the emissions unit, including those used for cleanup;
 - c. the organic compound emission rate for all materials, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly organic compound emission rate for all materials, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).

Note: The organic compound material information must be for materials as employed, including any mixtures or thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. The permittee shall collect and record the following information for the purpose of determining annual organic compound emissions on the days that non-photochemically reactive materials are used:
 - a. the company identification of all organic compounds employed in the emissions unit, including those used for cleanup;
 - b. the total amount of each organic compound used in the emissions unit, including those used for cleanup;
 - c. the total organic compound emission rate, in pounds per day;
 - d. the daily operating hours of the emissions unit; and,
 - e. the average hourly emission rate, i.e., daily emissions divided by operating hours, in pounds per hour (c/d).
3. The daily organic compound emissions as determined in Sections A.III.1 and A.III.2 shall be summed to arrive at total annual emissions.

4. The permittee shall record annually the OC emissions from emissions units P007 through P015, P018 through P020, and P024 through P036.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. For the days during which a photochemically reactive material was employed, an identification of each hour during which the average organic compound emission rate from the unit and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average organic compound emissions for each such hour.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the unit and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
 - c. The permittee shall submit deviation (excursion) reports which include the following information; for the days during which photochemically reactive materials were not employed, an identification of each hour during which the average hourly organic compound emissions from the unit and cleanup materials exceeded 50 pounds per hour, and the actual organic compound emissions for each such hour.
 - d. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual OC emissions for emissions units P007 through P015, P018 through P020, and P024 through P036, determined based upon the record keeping required in Section A.III of these terms and conditions.

V. Testing Requirements

1. Emission Limitation: 40 lbs OC per day when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.
2. Emission Limitation: 8 lbs OC per hour when photochemically reactive materials are employed

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

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PTI Application: 02-13004
Issued

Facility ID: 0243000241

Emissions Unit ID: P036

3. Emission Limitation: 50 lbs OC per hour

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. The permittee shall determine OC emissions by performing a material balance on all materials used in each batch. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing using U.S. EPA reference methods 25, 25A, or 18.

4. Emission Limitation: 75 tons OC per year from emissions units P007 through P015, P018 through P020, and P024 through P036

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P036 - Four cavity bag filter, S-9400	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904 Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P007

EMISSIONS UNIT DESCRIPTION Pressure filter, SS, 36 inches, S-12200

DATE INSTALLED 1/91

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photo-chemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**Enter Determination** Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P008

EMISSIONS UNIT DESCRIPTION Perforated basket centrifuge, SS, 32 inches, S-1900

DATE INSTALLED 3/91

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036 _____

FACILITY DESCRIPTION Process development pilot plant **CITY/TWP** Concord Twp

IDENTIFY THE AIR CONTAMINANTS: acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P009

EMISSIONS UNIT DESCRIPTION Pressure filter, SS, 36 inches, S-9300

DATE INSTALLED 10/93

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

NSPS? _____ NESHAP? _____ PSD? _____ APPLICABLE FEDERAL RULES: OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P010

EMISSIONS UNIT DESCRIPTION Pressure filter, SS, 30 inches, S-8400

DATE INSTALLED 12/93

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P011

EMISSIONS UNIT DESCRIPTION Vacuum shelf dryer, 48 square feet, D-1500

DATE INSTALLED 7/88

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P012

EMISSIONS UNIT DESCRIPTION Slant cone rotary dryer, 10 cubic feet, D-2000

DATE INSTALLED 6/91

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P013

EMISSIONS UNIT DESCRIPTION Double cone rotary dryer, 20 cubic feet, D-12000

DATE INSTALLED 2/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES NO

IDENTIFY THE AIR CONTAMINANTS: acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

FACILITY DESCRIPTION

Process development pilot plant

CITY/TWP

Emissions Unit ID: P036

Concord Twp

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P014

EMISSIONS UNIT DESCRIPTION Vacuum shelf dryer, 183.3 square feet, D-13000

DATE INSTALLED 7/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P015

EMISSIONS UNIT DESCRIPTION 100 gallon GLS reaction system, R-100

DATE INSTALLED 3/76

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904 Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twn

Emissions Unit ID: P036

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P018

EMISSIONS UNIT DESCRIPTION 50 gallon Ni-clad reaction system, R-400

DATE INSTALLED 6/78

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904 Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twn

Emissions Unit ID: P036

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P019

EMISSIONS UNIT DESCRIPTION 50 gallon GLS reaction system, R-500

DATE INSTALLED 2/81

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904 Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twn

Emissions Unit ID: P036

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P020

EMISSIONS UNIT DESCRIPTION 200 gallon GLS reaction system, R-600

DATE INSTALLED 6/84

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P024

EMISSIONS UNIT DESCRIPTION 500 gallon GLS reaction system, R-1000

DATE INSTALLED 11/89

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, t-butylamine, chlorine, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, hydrogen bromide, hydrogen chloride, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P025

EMISSIONS UNIT DESCRIPTION 100 gallon GLS reaction system, R-1300

DATE INSTALLED 11/89

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, t-butylamine, chlorine, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, hydrogen bromide, hydrogen chloride, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P026

EMISSIONS UNIT DESCRIPTION 500 gallon GLS reaction system, R-1400

DATE INSTALLED 6/91

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, t-butylamine, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P027

EMISSIONS UNIT DESCRIPTION 750 gallon SS reaction system, R-8300

DATE INSTALLED 1/94

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, t-butylamine, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P028

EMISSIONS UNIT DESCRIPTION 500 gallon GLS reaction system, R-10000

DATE INSTALLED 10/94

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P029

EMISSIONS UNIT DESCRIPTION 500 gallon GLS reaction system, R-17000

DATE INSTALLED 2/01

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, t-butylamine, chlorine, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, hydrogen bromide, hydrogen chloride, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P030

EMISSIONS UNIT DESCRIPTION LUWA wiped/thin film evaporator, 1.4 square feet

DATE INSTALLED 1/83

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P031

EMISSIONS UNIT DESCRIPTION 2000 gallon tank, T-2200

DATE INSTALLED 6/91

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, cyclohexane, diethyl ether, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P032

EMISSIONS UNIT DESCRIPTION Perforated basket filter, SS, 24 inches, S-3900

DATE INSTALLED 3/84

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904 Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twn

Emissions Unit ID: P036

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P033

EMISSIONS UNIT DESCRIPTION Pressure filter, SS, 24 inches, S-7000

DATE INSTALLED 12/90

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P034

EMISSIONS UNIT DESCRIPTION Pressure filter GLS, 24 inches, S-7100

DATE INSTALLED 6/90

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P035

EMISSIONS UNIT DESCRIPTION Pressure filter, SS, 24 inches, S-14600

DATE INSTALLED 12/97

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2) and Ohio EPA's "Air Toxic Policy".

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES _____ NO _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-13904

Facility ID: 0243000241

FACILITY NAME Ricerca LLC

FACILITY DESCRIPTION Process development pilot plant

CITY/TWP Concord Twn

Emissions Unit ID: P036

IDENTIFY THE AIR CONTAMINANTS:

acetic acid, acetone, acetonitrile, cyclohexane, dimethylformamide, ethyl acetate, ethyl alcohol, heptane, isopropyl acetate, isopropyl alcohol, methyl alcohol, methylamyl alcohol, methylene chloride, methyl tert butyl ether, pyridine, tetrahydrofuran, and toluene

NEW SC

PTI Num

FACILITY

Emissions Unit ID: P036

FACILITY DESCRIPTION Process development pilot plant CITY/TWP Concord Twp

SIC CODE 8731 SCC CODE 3-99-999-95 EMISSIONS UNIT ID P036

EMISSIONS UNIT DESCRIPTION Four cavity bag filter, S-9400

DATE INSTALLED 12/82

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	Attainment	< 8 lbs/hr and < 40 lbs/day when using photochemically reactive OC < 50 lbs/hr when not using photochemically reactive OC	< 75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036	8 lbs/hr and 40 lbs/day when using photochemically reactive OC 50 lbs/hr when not using photochemically reactive OC	75 TPY OC from emissions units P007 - P015, P018 - P020, and P024 - P036
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-21-07(G)(2).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____