



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-22950

Fac ID: 0243000241

DATE: 4/1/2008

Ricerca Biosciences, LLC
Michael 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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 4/1/2008
Effective Date: 4/1/2008**

FINAL PERMIT TO INSTALL 02-22950

Application Number: 02-22950
Facility ID: 0243000241
Permit Fee: **\$200**
Name of Facility: Ricerca Biosciences, LLC
Person to Contact: Michael 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):
Pressure filter.

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

Chris Korleski
Director

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 made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification
- 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, 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 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.

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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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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:
 - 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 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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.

12. Air Pollution Nuisance

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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.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

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

2. Reporting 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 (i.e., postmarked) quarterly, 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

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of any transfer of this permit.

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4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

6. 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.

7. 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).

8. Construction Compliance Certification

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If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. 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., postmarked), 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	75 Tons per Year, (facility-wide P007-P015, P018-P020, and P024-P044) (2.8 tons for P044)

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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.

Operations, Property, and/or Equipment - (P044) - S-19400, Pressure Filter, Glass Lined Steel, 30 inch diameter

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	See A.I.2.b. and A.I.2.c. below
OAC rule 3745-21-07(G)(2)	See A.I.2.a. 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 calculation 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 P044, combined, shall be limited to 75 tons per year.
- 2.d Based on the application for this permit to install, the permittee is exempted from the following federal requirements, as described:

NSPS-40 CFR Part 60-Standards for Performance for New Stationary Sources, Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes; Exempt based on design/operation as batch. (See 40 CFR Part 60, Subpart RRR, Section 60.700 (c)(1).

Emissions Unit ID: P044

MACT-Research and Activity Exemption: OAC rule 3745-31-28(C)(5) and 40 CFR Part 63, Subpart B, Section 63.40(f).

- 2.e** The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in section I.A.2.a, V.1.a and b. shall be void.
- 2.f** The emission unit will be used in the preparation of complex organic materials on a contract basis for Research and Development purposes. The materials are prepared by conducting batch chemical reactions. Organic (and sometimes inorganic) compounds are mixed together and are held at various conditions to perform the reaction in the reactor. The reactor is charged to a filter (P044) where the solids are separated away from the liquid solvent(s). The solvent wet solids are charged to a dryer where the solvent is removed from the desired solids. The solvent is recovered in a vacuum/solvent recovery system which is vented to one of two wet scrubbers.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep the following daily records for all materials used in this emissions unit:
 - a. the identification of the chemical compound and its physical state; and
 - b. for any liquid organic materials, whether or not each material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall develop an emission factor for the total amount of organic compounds emitted for each product generated in this emissions unit. The emissions factors shall be in units of pounds of organic compounds emitted per hour of operation for each product generated. The permittee shall indicate whether or not each emission factor is based upon the use of any photochemically reactive materials.

A condensed summary of the permittee's calculation and record of each emission factor shall be submitted to the Ohio EPA Northeast District Office for review and approval. If agreed upon by Ohio EPA, the summaries may be furnished upon request.

Emissions Unit ID: P044

3. The permittee shall collect and record the following information each day for each product generated in this emissions unit:
 - a. the company identification for the product;
 - b. whether or not any photochemically reactive materials were used to generate the product;
 - c. the hours of operation (during the day of record) to generate the product;
 - d. the emission factor for the product, in pounds of organic compounds emitted per hour of operation; and
 - e. the total organic compound emission rate, in pounds © x d).
4. The permittee shall collect and record the following information each day for all the products generated in this emissions unit:
 - a. for each day during which any photochemically reactive material was used as a cleanup material and/or raw material(s) for one or more of the products, the total organic compound emissions for the entire day;
 - b. for each day during which no photochemically reactive material was used as a cleanup material nor for any of the products, the total emissions from all products produced that day, in pounds (the summation of A.III.3.e); and
 - c. the total number of hours the emissions unit was in operation to produce all the products (not to exceed 24 hours minus the total hours for cleanup).
5. The permittee shall determine the total amount of organic compounds emitted for each day cleaning of the emissions unit. The organic compounds shall be in units of pounds of organic compounds emitted and shall be determined by material balance. The permittee shall indicate whether or not each cleaning of the emissions unit is based upon the use of any photochemically reactive materials.

A condensed summary calculation of the organic compound emissions for each cleaning shall be submitted to the Ohio EPA Northeast District Office for review and approval. If agreed upon by Ohio EPA, the summaries may be furnished upon request.

Each cleaning of the emissions unit shall be performed in accordance with the procedures and assumptions used in the material balance calculations.

6. The permittee shall collect and record the following information each day when cleaning of the emissions unit is performed:
 - a. the company identification for each cleanup material;

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- b. whether or not each cleanup material is a photochemically reactive material;
 - c. the total organic compound emissions from the cleanup materials that are photochemically reactive materials, in pounds per day;
 - d. the total organic compound emissions from the cleanup materials that are not photochemically reactive materials, in pounds per day;
 - e. the number of hours photochemically reactive materials were employed;
 - f. the number of hours nonphotochemically reactive materials were employed (not including hours when photochemically reactive materials and nonphotochemically reactive materials were employed at the same time); and
 - g. the total organic compound emissions from all cleanup materials, in pounds © + d).
7. The permittee shall collect and record the following information each day for this emissions unit:
- a. for each day during which any photochemically reactive material was used for one or more of the products and/or as a cleanup material, the total daily organic compound emissions from all the cleanup materials that are photochemically reactive materials and all the products, in pounds per day (A.III.4.a + A.III.6.c);
 - b. for each day during which any photochemically reactive material was used for one or more of the products and/or as a cleanup material, the total hourly organic compound emissions from all the cleanup materials that are photochemically reactive materials and all the products, in pounds per hour (A.III.7.a/[A.III.4.c + A.III.6.e]);
 - c. for each day during which any photochemically reactive material was used for one or more of the products and/or as a cleanup material, the total daily organic compound emissions from all the cleanup materials that are not photochemically reactive materials, in pounds per day (A.III.6.d);
 - d. for each day during which no photochemically reactive material was used for any of the products and any of the cleanup materials, the total daily organic compound emissions from all products and all cleanup materials,

Emissions Unit ID: P044

in pounds per day (A.III.4.b + A.III.6.d); and

- e. for each day during which no photochemically reactive material was used for any of the products and any of the cleanup materials, the total hourly organic compound emissions from all products and all cleanup materials, in pounds per hour (A.III.7.d/[A.III.4.c + A.III.6.f]).
8. The permittee shall record annually the total organic compound emissions from this emissions unit and from emissions units P007 through P015, P018 through P020, and P024 through P044, combined. The annual emissions (in tons) for this emissions unit shall be calculated by summing the values from A.III.7.a, A.III.7.c and A.III.7.d for the entire calendar year, and then dividing by 2000.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for each during which a photochemically reactive material was employed for one or more of the products and/or as a cleanup material, an identification of each day during which the average hourly organic compound emissions from the emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emission rate for each such day;
 - b. for each during which a photochemically reactive material was employed for one or more of the products and/or as a cleanup material, an identification of each day during which the organic compound emissions from the emissions unit exceeded 40 pounds per day, and the actual organic compound emission rate for each such day; and
 - c. for each during which no photochemically reactive material was employed for any of the products and any of the cleanup materials, an identification of each day during which the average hourly organic compound emissions from the emissions unit exceeded 50 pounds per hour, and the actual average hourly organic compound emission rate for each such day.
2. Each year, the permittee shall submit an annual report, by April 30, for the preceding calendar year. Each annual report shall specify the annual organic compound emissions for this emissions unit and for emissions units P007 through P015, P018 through P020, and P024 through P043, combined (P007 through P015, P018 through P020, and P024 through P044, combined).

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

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a. Emission Limitation:

On the days that photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), are employed, applied, evaporated, or dried, the permittee shall emit not more than 40 (forty) pounds per day of organic compounds, as defined in OAC rule 3745-21-01(B)(4).

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Applicable Compliance Method:

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

b. Emission Limitation:

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 8 (eight) pounds per hour of organic compounds, as defined in OAC rule 3745-21-01(B)(4).

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 in 40 CFR Part 60, Appendix A.

c. Emission Limitation:

On the days that no photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), are employed, applied, evaporated, or dried, the permittee shall emit no more than 50 (fifty) pounds per hour of organic compounds.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Section A.III of these terms and conditions. If required by the Ohio EPA, compliance shall be demonstrated by emissions testing performed in accordance with the procedures specified in U.S. EPA reference Methods 25, 25A, or 18, in 40 CFR Part 60, Appendix A.

d. Emission Limitation:

The emissions of organic compounds from emissions units P007 through P015, P018 through P020, and P024 through P044, combined, shall be limited to 75 (seventy five) tons per year.

Applicable Compliance Method:

Emissions Unit ID: P044

Issued: 4/1/2008

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

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2. Formulation data shall be used to determine the organic compound contents of the materials employed for each final product and each cleanup material.

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.

Operations, Property, and/or Equipment -(P044) - S-19400, Pressure Filter, Glass Lined Steel, 30 inch diameter

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05	None

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P044) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant potentially emitted 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 result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetic Acid

TLV (ug/m3): 25,000

Maximum Hourly Emission Rate (lbs/hr): 0.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 154 (EF45) and 141

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(EF76)
MAGLC (ug/m3): 2,500

Pollutant: acetone
TLV (ug/m3): 1,188,000
Maximum Hourly Emission Rate (lbs/hr): 2.2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 161 (EF45) and 148 (EF76)
MAGLC (ug/m3): 118,800

Pollutant: acetonitrile
TLV (ug/m3): 67,000
Maximum Hourly Emission Rate (lbs/hr): 0.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 45 (EF45) and 41 (EF76)
MAGLC (ug/m3): 6,700

Pollutant: chloroform
TLV (ug/m3): 48,834
Maximum Hourly Emission Rate (lbs/hr): 3.8
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 282 (EF45) and 259 (EF76)
MAGLC (ug/m3): 4,883

Pollutant: cyclohexane
TLV (ug/m3): 1,030,000
Maximum Hourly Emission Rate (lbs/hr): 1.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 100 (EF45) and 92 (EF76)
MAGLC (ug/m3): 103,000

Pollutant: diethyl ether
TLV (ug/m3): 1,210,000
Maximum Hourly Emission Rate (lbs/hr): 6.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 479 (EF45) and 440 (EF76)
MAGLC (ug/m3): 121,000

Pollutant: dimethylformamide
TLV (ug/m3): 30,000
Maximum Hourly Emission Rate (lbs/hr): 0.05

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4 (EF45) and 4 (EF76)
MAGLC (ug/m3): 3,000

Pollutant: ethyl acetate
TLV (ug/m3): 1,440,000
Maximum Hourly Emission Rate (lbs/hr): 1.3
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 99 (EF45) and 90 (EF76)
MAGLC (ug/m3): 144,000

Pollutant: ethyl alcohol
TLV (ug/m3): 1,880,000
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): 188,000

Pollutant: heptane
TLV (ug/m3): 1,640,000
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): 164,000

Pollutant: isopropyl acetate
TLV (ug/m3): 1,044,000
Maximum Hourly Emission Rate (lbs/hr): 1.0
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 74 (EF45) and 68 (EF76)
MAGLC (ug/m3): 104,400

Pollutant: isopropyl alcohol
TLV (ug/m3): 983,000
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): 98,300

Pollutant: methyl alcohol
TLV (ug/m3): 262,000
Maximum Hourly Emission Rate (lbs/hr): 0.7
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49 (EF45) and 45 (EF76)
MAGLC (ug/m3): 26,200

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Pollutant: methylamyl alcohol

TLV (ug/m3): 104,000

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): 10,400

Pollutant: methylene chloride

TLV (ug/m3): 174,000

Maximum Hourly Emission Rate (lbs/hr): 6.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 447 (EF45) and 410 (EF76)

MAGLC (ug/m3): 17,400

Pollutant: methyl tert butyl ether

TLV (ug/m3): 144,000

Maximum Hourly Emission Rate (lbs/hr): 3.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 265 (EF45) and 243 (EF76)

MAGLC (ug/m3): 14,400

Pollutant: pyridine

TLV (ug/m3): 16,000

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): 1,600

Pollutant: tetrahydrofuran

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 1.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 140 (EF45) and 128 (EF76)

MAGLC (ug/m3): 59,000

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 0.4

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

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MAGLC (ug/m3): 18,800

- * 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 or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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) solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, 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 they conduct evaluations to determine that the changed emissions unit will still satisfy the

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"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 the 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 P044, (that is all units subject to the "Air Toxic Policy") to demonstrate compliance with the "Air Toxic Policy". This sum shall take into account the actual equipment's operating schedule and equipment utilization. Comparison of the sum to the MAGLC shall be made to demonstrate compliance with the "Air Toxic Policy".

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None