State of Ohio Environmental Protection Agency

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50 W. Town St., Suite 700
Columbus, Ohio 43215

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www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

2/10/2009

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Michael Contenza
Ricerca Biosciences, LLC
7528 AUBURN ROAD
CONCORD TOWNSHIP, OH 44077-1000

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0243000241
Permit Number: P0104304
Permit Type: Initial Installation
County: Lake

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northeast District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Ricerca Biosciences, LLC

Facility ID: 0243000241
Permit Number: P0104304
Permit Type: Initial Installation
Issued: 2/10/2009
Effective: 2/10/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Ricerca Biosciences, LLC

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0104304
Facility ID: 0243000241
Effective Date: 2/10/2009

Authorization

Facility ID: 0243000241
Facility Description: Chemical Manufacture/Research and Development
Application Number(s): A0036683
Permit Number: P0104304
Permit Description: Initial installation of a 224 square foot Vacuum Shelf Dryer System at Ricerca, a Title V research and development facility
Permit Type: Initial Installation
Permit Fee: $400.00
Issue Date: 2/10/2009
Effective Date: 2/10/2009

This document constitutes issuance to:

Ricerca Biosciences, LLC
7528 AUBURN ROAD
CONCORD TOWNSHIP, OH 44077-1000

Of a Permit-to-Install for the emissions unit(s) identified on the following page.

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

Authorization (continued)

Permit Number: P0104304
Permit Description: Initial installation of a 224 square foot Vacuum Shelf Dryer System at Ricerca, a Title V research and development facility

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P045**
Company Equipment ID:	D-19600
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 2.a), Severability Clause

(2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A. 9., Reporting Requirements

(5) Standard Term and Condition A. 10., Applicability

(6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A. 14., Public Disclosure

(8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A. 16., Fees

(10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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.

4. Monitoring and Related Record Keeping 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:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) 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:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) 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 Ohio EPA DAPC, Northeast District Office. 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 A.15. below if no deviations occurred during the quarter.

(3) 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 Ohio EPA DAPC, Northeast District Office 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.

(4) This permit is for an emissions unit located at a Title V facility. 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.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northeast District Office 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).

6. Compliance Requirements

a) 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.

b) 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.

c) 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:

(1) 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.

(2) 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.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) 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.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office 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:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. 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 Ohio EPA DAPC, Northeast District Office.

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 Ohio EPA DAPC, Northeast District Office. 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.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

a) 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.

b) If applicable, authorization to install any new 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 has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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.

16. 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.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

18. 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.

19. 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.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The following Permit to Install facility-wide specific terms and conditions are state only enforceable:

   a) None

C. Emissions Unit Terms and Conditions

1. P045, D-19600

Operations, Property and/or Equipment Description:

Vacuum Shelf Dryer System 224 square feet; D 19,600 P045

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

(1) d)(9),(10)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)b. and b)(2)c. below
b.	OAC rule 3745-21-07(G)(2)	See b)(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, 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 P045, 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).

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 b)(2)a, f).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 where the solids are separated away from the liquid solvent(s). The solvent wet solids are charged to a dryer (P045) 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.

c) Operational Restrictions

(1) None.

d) 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.

(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 d)(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;

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 (c. + 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 r reactive materials and all the products, in pounds per day d)(4)a. + d)(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 [d)(7)a./[d)(4)c. + d)(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 [d)(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, in pounds per day [d)(4)b. + d)(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 ([d)(7)d./[d)(4)c. + d)(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 P045, combined. The annual emissions (in tons) for this emissions unit shall be calculated by summing the values from d)(7)a., d)(7)c. and d)(7)d. for the entire calendar year, and then dividing by 2000.

(9) The permit to install for this emissions unit (P045) 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 (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
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

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)
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 "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.

(10) 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 P045, (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".

e) 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 P045, combined (P007 through P015, P018 through P020, and P024 through P045, combined).

f) Testing Requirements

(1) Compliance with the emission limitations in sections b)1 and b)2 of these terms and conditions shall be determined in accordance with the following methods:

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).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping required in Section d) 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 d) 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 P045, combined, shall be limited to 75 (seventy five) tons per year.

Applicable Compliance Method:

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

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

f) Miscellaneous Requirements

(1) None.