



State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL
HAMILTON COUNTY

Street Address:

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

Mailing Address:
Lazarus Gov. Center

Application No: 14-05137

DATE: 7/24/2001

Cincinnati Specialties LLC
Fred Tudor
501 Murray Rd
Cincinnati, OH 452171014

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of \$200 will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA HCDES KY IN Ohio-Kentucky-Indiana Reg coun of Gov



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install
Terms and Conditions

Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance

DRAFT PERMIT TO INSTALL 14-05137

Application Number: 14-05137
APS Premise Number: 1431390137
Permit Fee: **To be entered upon final issuance**
Name of Facility: Cincinnati Specialties LLC
Person to Contact: Fred Tudor
Address: 501 Murray Rd
Cincinnati, OH 452171014

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

**501 Murray Rd
Saint Bernard, Ohio**

Description of proposed emissions unit(s):

Modification of Fine Chemicals System I.

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

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

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 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.10 below if no deviations occurred during the quarter.

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

- 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

Issued: To be entered upon final issuance

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.

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

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

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.

Cincinnati Specialties LLC

PTI Application: 14-05137

Issued: To be entered upon final issuance

Facility ID: 1431390137

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.

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.

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

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

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit 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).

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

9. 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.

10. 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> |
|------------------|----------------------|
| CI | 0.92 |
| OC | 0.53 |
| PM | 0.15 |

Cincinnati Specialties LLC

Facility ID: 1431390137

PTI Application: 14-05137

Issued: To be entered upon final issuance

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

Cincinnati

PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control
Measures

PM/PM10 emissions shall not exceed 1.94 lbs/hr, 5.82 lbs/week, and 0.15 TPY

Organic compounds (OC) shall not exceed 6.84 lbs/hr, 20.52 lbs/week, and 0.53 TPY

Chlorine (Cl) emissions shall not exceed 0.21 lb/hr and 0.92 TPY

See term A.II.1 - A.II.6.

The hourly emission limitations outlined are based upon the emission unit's potential to emit. Therefore, no hourly recordkeeping or reporting requirements are necessary to demonstrate compliance with these limits.

Visible particulate emissions shall not exceed 20% opacity, as a three-minute average.

The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the production limitation, the use of scrubbers and the emission limitations.

II. Operational Restrictions

1. The emissions from the fine chemicals manufacturing system (P006) shall be vented to venturi scrubber P150 and packed bed scrubber X150 in series.
2. The total combined pressure drop across scrubber P150 and X150 shall be continuously maintained at a value of not less than 0.35 inches of water while emissions are being vented to the scrubbers.
3. The scrubber liquor flow rate for scrubber P150 and X150 shall be continuously maintained at a value of not less than the following while emissions are being vented to the scrubber:
 - a. P150: not less than 15 gallons per minute; and
 - b. X150: not less than 5 gallons per minute.
4. The pH for scrubber P150 and X150 shall be continuously maintained at a value of not less than the following while emissions are being vented to the scrubber:
 - a. P150: not less than 4; and
 - b. X150: not less than 4.
5. When loading solid materials into reactors, PM/PM10 emissions shall be minimized or eliminated to the extent possible by minimizing the drop height and pour rate into the reactor.
6. The maximum number of batches of pyridine propane sultone produced in emissions unit P006 shall not exceed 3 per week.

III. Monitoring and/or Recordkeeping Requirements

1. For venturi scrubber P150 and packed bed scrubber X150, the permittee shall properly install, operate, and maintain equipment to continuously monitor the static pressure drop across the scrubbers, the scrubber liquor flow rates, and the pH of the scrubber liquor while emissions are being vented to the scrubbers. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations,

instructions, and operating manuals.

The permittee shall collect and record the following information each day for scrubbers P150 and X150:

- a. The total combined pressure drop across the scrubbers, in inches of water, on a once per shift basis.
 - b. The scrubber liquor flow rates, in gallons per minute, on a once per shift basis.
 - c. The pH of the scrubber liquor, on a once per shift basis.
 - d. A log of the downtime for the capture (collection) systems, control devices, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. The color of the emissions;
 - b. The total duration of any visible emission incident; and
 - c. Any corrective actions taken to eliminate the visible emissions.
3. The permittee shall maintain a weekly log of the number of batches of pyridine propane sultone produced.
4. The permittee shall maintain monthly records of the type and amount of each material produced in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels as specified in term A.II:
 - a. The total combined static pressure drop across the scrubbers;
 - b. The scrubber liquor flow rates; and
 - c. The pH of the scrubber liquor.

Issued: To be entered upon final issuance

2. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the number of batches of pyridine propane sultone produced exceeded three and the actual number of batches produced for each such week.
 - b. An identification of each week during which the organic compound emissions from emissions unit P006 exceeded 20.52 lbs/week, and the actual organic compound emissions for each such week.
 - c. An identification of each week during which the particulate emissions from emissions unit P006 exceeded 5.82 lbs/week, and the actual particulate emissions for each such week.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Terms and Conditions A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

2. Compliance with the emission limitations outlined in this permit shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in the PTI application 14-05137 submitted on April 13, 2001.
3. Compliance with terms A.II.2 - A.II.4 shall be demonstrated by the record keeping in term A.III.1.
4. Compliance with term A.II.6 shall be demonstrated by the record keeping in term A.III.3.

Cincinnati Specialties LLC
PTI Application: 14-05137
Issued

Facility ID: 1431390137

Emissions Unit ID: **P006**

VI. Miscellaneous Requirements

1. If probable cause exists indicating the emissions unit is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3745-17-07, the permittee shall be required to submit and implement a control program which will bring this emissions unit into compliance.
2. The terms and conditions in this permit to install shall supersede permit to install (PTI) 14-02916 issued on April 14, 1993,

Issued: To be entered upon final issuance

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> |
|--|--------------------------------------|--|
| P006 - Fine chemicals system #1 with venturi scrubber (P150) and packed bed scrubber (X150) - batch manufacturing of specialty chemicals | Air Toxic Policy | See B.VI.1. |

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

Issued: To be entered upon final issuance

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Cincinnati Specialties LLC
 PTI Application: 14-05137
 Issued: To be entered upon final issuance

Facility ID: 1431390137

Emissions Unit ID: P006

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'

| | Electronic | <u>Additional information</u> File Name Convention (your PTI # plus this letter) | <u>Hard Copy</u> | <u>None</u> |
|--|--------------------------|--|-------------------------------------|-------------------------------------|
| Calculations (required) | <input type="checkbox"/> | 0000000c.wpd | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Modeling form/results | <input type="checkbox"/> | 0000000s.wpd | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| PTI Application (complete or partial)* | <input type="checkbox"/> | 0000000a.wpd | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| BAT Study | <input type="checkbox"/> | 0000000b.wpd | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other/misc. | <input type="checkbox"/> | 0000000t.wpd | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

[NSR Discussion](#)

PTI 14-05137

Cincinnati Specialties, Inc
 501 Murray Road
 Cincinnati, OH 45217-1014
 PN: 1431390137

Cincinnati Specialties is a Title V facility that manufactures chemical products in batch and continuous processes. Fine Chemical System I, P006, is permitted to produce monosodium-4-chlorophthalate (NaCOPA). Emissions consist of OC and Cl and are controlled by a venturi scrubber. P006 is being modified to produce a new product, pyridine propane sultone (PPS). The batch process involves several steps: the formation of an intermediate, a phase separation, formation of a crude product, purification, removal of water, and solvent drying. Under the modification, a new tank (T-160) and packed bed scrubber (X-150) will be added.

The first 2 steps are the formation of an intermediate (T-125) and a phase separation. A reaction vessel from P025 (T-451) will be used to do a water extraction and phase separation of the PPS intermediate from the process solvent. For the production of PPS, this reaction vessel will be considered part of P006. The intermediate is transferred to T-100 where the crude product is formed. After the crude product is formed, it goes to a purification system, Fine Chemical System 15 (not installed yet). During this step, a salt solution of PPS will be treated using electro dialysis and ion exchange. No chemical reactions will take place except for the formation of salt solutions. Emissions during this step will be water vapor. Emissions from this step are de minimus. The next step evaporates and condenses water from the salt solution of PPS. Emissions during this step will be water vapor. This step uses vessels from P004 (T-520 and T-500). The final step is solvent drying (T-160).

The modification of P006 includes emissions from the formation of the intermediate, the phase separation, formation of the crude product (salt solution of PPS), and solvent drying. The purification and condensation steps have negligible organic compound emissions. Emissions from all the steps except the purification and condensation step are vented to a venturi scrubber (existing) and a packed bed scrubber (new) in series.

Cincinnati Specialties LLC
PTI Application: 14-05137
Issued: To be entered upon final issuance

Facility ID: 1431390137

Emissions Unit ID: **P006**

The modification of P006 will increase OC and PM emissions; Cl emissions will not increase. OC and PM emissions have hourly and weekly emission limits. The hourly emission rate was determined from the batch emissions. The process will be limited to 3 batches per week. The new emission rates are 0.53 TPY OC and 0.15 TPY PM. Because the potential to emit is increasing, this is a Chapter 31 modification. BAT is satisfied by emissions limitations, production limitation and the use of a scrubber. Air toxics modeling was not necessary because the maximum emissions are less than 1 TPY. The applicable rules are OAC rule 3745-17-07(B)(1), 3745-17-08(B) and 3745-21-07(G).

Due to public concern in this area, this PTI should be issued in draft.

The fee for this permit is: \$200 (based on PWR 0-1000 lb/hr)

Prepared by: Eileen C. Moran

Date: May 8, 2001

Please complete for these type permits ([For PSD/NSR Permit, place mouse over this text](#)):

Synthetic Minor Determination and/or **Netting Determination**
 Permit To Install ENTER PTI NUMBER HERE

- A. Source Description
- B. Facility Emissions and Attainment Status
- C. Source Emissions
- D. Conclusion

Please complete:

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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| Cl | 0.92 |
| OC | 0.53 |
| PM | 0.15 |

Cincinnati

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: **P006**