

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install: **01-12225**

A. Source Description

The 2,000 gallon reactor vessel for R-3 (P014) with weigh tank and condenser was installed in 1979 and was permitted under PTI 01-04113 for urea-formaldehyde resin production limiting allowable emissions to 0.9 tons OC/yr.

This PTI will allow the replacement of an existing 2000 gallon tank with a new 3,000 gallon stainless steel vessel sitting on a scale for reactant addition and will incorporate proposed emissions based on melamine-formaldehyde and phenol-formaldehyde resin testing results.

B. Facility Emissions and Attainment Status

CRC is an existing synthetic minor facility with reported annual emissions of 8.7 tons methanol and 19.4 tons total HAP in 2006. Franklin county has been designated as being in basic non-attainment for ozone and PM^{2.5}.

C. Source Emissions

CRC is proposing to replace the reactor vessel and produce both red and white resins with a requested increase to 1.0 ton OC/yr based both emission test results and ideal gas law equations.

D. Conclusion

The federally enforceable emissions limitations in this permit will allow CRC to maintain facility-wide emissions at less than 10 tons methanol and 24.9 tons total combined HAPs. The facility-wide OC emissions will be maintained under the major source threshold for Title V permitting and MACT applicability for Miscellaneous Organic Chemical Manufacturing under 40 CFR Part 63 subpart FFFF.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
FRANKLIN COUNTY**

CERTIFIED MAIL

Street Address:

Mailing Address:

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

Lazarus Gov.
Center

Application No: 01-12225

Fac ID: 0125040238

DATE: 3/25/2008

Capital Resin Corp
Anne Tyler
324 Dering Ave
Columbus, OH 43207-2956

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, 43216-1049.

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 **\$375** 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.

Sincerely,

Michael W. Ahern

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

CC: USEPA

CDO

Mid-Ohio Regional Planning Commission



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 01-12225

Application Number: 01-12225
Facility ID: 0125040238
Permit Fee: **To be entered upon final issuance**
Name of Facility: Capital Resin Corp
Person to Contact: Anne Tyler
Address: 324 Dering Ave
Columbus, OH 43207-2956

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

**324 Dering Ave
Columbus, Ohio**

Description of proposed emissions unit(s):

Reactor number 3.

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

Capital Resin Corp
PTI Application: 01-12225
Issued: To be entered upon final issuance
Part I - GENERAL TERMS AND CONDITIONS

Facility ID: 0125040238

A. 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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

Capital Resin Corp

Facility ID: 0125040238

PTI Application: 01-12225

Issued: To be entered upon final issuance

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. Termination of Permit to Install

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

Capital Resin Corp
PTI Application: 01-12225
Issued: To be entered upon final issuance

Facility ID: 0125040238

9. 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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available

Capital Resin Corp

Facility ID: 0125040238

PTI Application: 01-12225

Issued: To be entered upon final issuance

Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

14. 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.

15. 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.

B. 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>
OC	1.0
facility-wide	9.9
individual HAP	
facility-wide	24.9
total HAP	

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. 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 -(P014) - Reactor 3 (R-3000) with condenser (modification of PTI 01-4113)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See sections A.2.a and B.1 below.
OAC rule 3745-21-07(G)(2)	See section A.2.b below.
OAC rule 3745-15-06	See sections A.2.c below.
OAC rule 3745-31-05(C) (synthetic minor to avoid Title V and MACT requirements)	See sections A.2.d below.

2. Additional Terms and Conditions

- 2.a "Permit to Install 01-12225 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - i. all of the OC emissions from this emissions unit shall be vented to the condenser when the emissions unit is in operation; and
 - ii. the emissions of OC from this emissions unit shall not exceed 1.0 ton per year.
- 2.b The emission limitation specified by this rule is less stringent than the maximum potential to emit for this emissions unit
- 2.c The permittee shall, prior to production, ensure that this emissions unit is connected to the Emergency Containment System and that the Emergency Containment System is functional.

Issued: To be entered upon final issuance

If any event causes a rupture disc to open, releasing material to the Emergency Containment System, all resin production shall be stabilized and no new batches will be started or restarted until any necessary repairs are made. The emergency containment system shall be drained and prepared for normal kettle operation prior to production restart.

- 2.d** The restrictions on the potential to emit for facility-wide individual hazardous air pollutants (HAP), total combined HAP and organic compounds (OC) established under OAC rule 3745-31-05(C) are as follows:

Facility-wide emissions shall not exceed 99.9 tons of OC, 9.9 tons of individual hazardous air pollutant (HAP) emissions and 24.9 tons of total combined hazardous air pollutant (HAPs) emissions based on a rolling, 12-month summation of monthly emissions.

Facility-wide emissions shall be determined from a summation of monthly emissions from the following emission units: P004, P005, P006, P007, P008, P010, P012, P013, P014, P016, P027, P018, P019, P020, P021, P023, P024, P025, P026 and all emissions units that are exempt or permit by rule (OAC rule 3745-31-03), and de minimis (OAC rule 3745-15-05).

Therefore, the provisions for Title V permitting and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing in 40 CFR Part 63 Subpart FFFF will not be applicable.

¹A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

B. Operational Restrictions

1. In order to maintain compliance with the applicable emission limitation contained in this permit, the acceptable maximum average temperature of the exhaust gases from the condenser, as a 15-minute average, shall not be more than 77 degrees Fahrenheit. The condenser shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from

Emissions Unit ID: **P014**

the emission control condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect the temperature of the exhaust gases from the condenser, during each day of operation, and shall record and maintain the following information each day:

- a. all time, when the emissions unit was in operation, during which the maximum average temperature, as a 15-minute average, of the exhaust gases from the condenser exceeded 77 degrees Fahrenheit; and
- b. a log of the downtime for the capture (collection) system, condenser, and monitoring equipment when the associated emissions unit was in operation.

These records shall be maintained at the facility for a period of three years.

2. Whenever the monitored temperature of the exhaust gases deviates from the range/limit specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;

Emissions Unit ID: **P014**

- i. the total period of time (in minutes) during which there was deviation;
- j. the exhaust gas temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The exhaust gas temperature limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted exhaust gas temperature limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the exhaust gas temperature limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

3. At the end of each calendar month, the permittee shall calculate and record the following information for each day of the preceding month:
 - a. the number of batches processed in this emissions unit;
 - b. an identification of OC and individual HAP emissions for each batch;
 - c. the summation of actual OC and individual HAP emissions for each month of operation, from all batches produced each month; and
 - d. the summation of actual OC and individual HAP emissions from this emissions unit during the rolling, 12-month period of operation calculated by summing the emissions from each month of operation to the previous 11-month summations.
4. The permittee shall maintain the following monthly records on-site to document compliance with the facility-wide restriction on the potential to emit for OC, individual HAP, and total HAP. The records shall include a minimum of the following information for emissions units P004, P005, P006, P007, P008, P010, P012, P013, P014, P016, P027, P018, P019, P020, P021, P023, P024, P025, P026, and any permit exempt and de minimus emissions unit :
 - a. the calculated facility-wide OC emissions for the current month, in pounds or tons, for each the above emissions units;

Issued: To be entered upon final issuance

- b. the rolling, 12-month summation of facility-wide OC emissions (i.e., the OC emissions from the current month added to the summation of the OC emissions from the previous 11 months) for all the above emissions units;
- c. the calculated facility-wide individual HAP emissions for the current month, in pounds or tons, for each the above emissions units;
- d. the calculated facility-wide total HAP emissions for the current month, in pounds or tons, for each the above emissions units;
- e. the rolling 12-month summation of individual HAP emissions (i.e., the individual HAP emissions from the current month added to the summation of the individual HAP emissions from the previous 11 months) for all the above emissions units;
- f. the rolling 12-month summation of total facility-wide HAP emissions (i.e., the to a; facility-wide HAP emissions from the current month added to the summation of the total facility-wide HAP emissions from the previous 11 months) for all the above emissions units; and
- g. the rolling 12-month summation of facility-wide OC, individual HAP, total HAP emissions from permanent exempt and de minimis emissions units.

D. Reporting Requirements

- 1. The permittee shall submit quarterly summaries that identify:
 - a. all 15-minute blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases from the condenser was more than 77 degrees Fahrenheit;
 - b. any records of downtime (date and length of time) for the capture (collection) system, the condenser, and/or the monitoring equipment when the emissions unit was/were in operation; and
 - c. a log of the operating time for the capture system, condenser, monitoring equipment, and the emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- 2. The permittee shall submit quarterly reports that identify the following information

Emissions Unit ID: **P014**

concerning the operation of the condenser during the operation of the emissions unit:

- a. each period of time when the average temperature of the exhaust gases, as a 15-minute average, from the condenser was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
- b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

3. The permittee shall submit quarterly deviation (excursion) reports for deviations (excursions) associated with exceedences of the following facility-wide emission limitations and operational restrictions:
 - a. the rolling 12-month individual HAP and total HAP emission limitations listed in term A.2.d.i; and
 - b. the rolling, 12-month OC emission limitation listed in term A.2.d.ii.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
The OC emissions from this emissions unit shall not exceed 1.0 ton per year.

Issued: To be entered upon final issuance

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated based upon the record keeping requirements in section C.3 of this permit. The annual OC emission was derived at the maximum potential to emit using an emission factor of 1.3 lbs OC/batch derived during phenol-formaldehyde resin production multiplied by 4 batches per day by 31 days per month by 365 day per year and divided by 2,000 lbs/ton.

b. Emission Limitation:

The facility-wide emissions of individual HAP and total HAP shall not exceed 9.9 tons and 24.9 tons as a rolling, 12-month summation, respectively.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in section C.4 of this permit for all the emission units at the facility.

c. Emission Limitation:

The total facility-wide OC emissions shall not exceed 99.9 tons per rolling, 12-month period from all emissions units listed in above .

Issued: To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in section C.4 of this permit above for all the emission units at the facility.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification(s) to the emissions unit was less than 1 ton per year of each toxic pollutant that has a listed Threshold Limit Value (TLV), 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").