

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Franklin County
Application No: 01-6746
NSPS
TOXIC REVIEW
SYNTHETIC MINOR

CERTIFIED MAIL

November 5, 1997

CAPITAL RESINS CORPORATION
MICHAEL BLACK
324 DERING AVE
COLUMBUS, OH 43207

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

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

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

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

Very truly yours,



Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
CENTRAL DISTRICT OFFICE, DAPC
TAMMY HILKENS, DAPC
George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

Permit to Install Terms and Conditions

Application No. 01-6746
APS Premise No. 0125040238
Permit Fee: \$1000.00

Name of Facility: CAPITAL RESINS CORPORATION

Person to Contact: MICHAEL BLACK

Address: 324 DERING AVE
COLUMBUS, OH 43207

Location of proposed source(s): 324 DERING AVENUE
COLUMBUS, OHIO

Description of proposed source(s):
SULFONATION SYSTEM AR-3 & RESTRICTION ON BATCH PRODUCTION FO
R THREE SULFONATION SYSTEMS & ACID BLENDING IN AR-3.

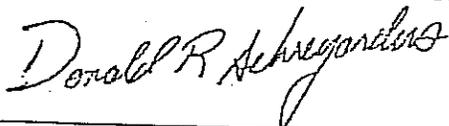
Date of Issuance: November 5, 1997

Effective Date: November 5, 1997

The above named entity is hereby granted a permit to install for the above described source(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 source(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 source(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

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

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

If the construction of the proposed source(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 Ohio Administrative Code (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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for CAPITAL RESINS CORPORATION located in Franklin County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P006	Sulfonation System AR-1	Compliance with applicable rules and allowable limits; reactor vented to activated carbon canister for 50 percent control	3745-31-05 3745-21-09 (DD) 40 CFR 60 Subpart VV	1.5 pounds toluene/day 0.28 ton toluene/year; 0.68 pound methanol/day 0.12 ton methanol/year; 1.5 pounds VOC/day 0.28 ton VOC/year; and see Additional Special Terms and Conditions
P013	Sulfonation System AR-2	Compliance with applicable rules and allowable limits; reactor vented to activated carbon canister for 50 percent control	3745-31-05 3745-21-09 (DD) 40 CFR 60 Subpart VV	1.5 pounds toluene/day 0.28 ton toluene/year; 0.68 pound methanol/day 0.12 ton methanol/year; 1.5 pounds VOC/day 0.28 ton VOC/year; and see Additional Special Terms and Conditions
P018	Sulfonation System AR-3 with Acid Blend	Compliance with applicable rules and allowable limits;	3745-31-05 3745-21-09 (DD) 40 CFR 60 Subpart VV	1.5 pounds toluene/day 0.28 ton toluene/year; 1.1 pounds methanol/hour

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P018		reactor vented to activated carbon canister for 50 percent control		7.7 pounds methanol/day 1.4 tons methanol/year; 14.5 pounds VOC/day 2.6 tons VOC/year; and see Additional Special Terms and Conditions

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Volatile Organic Compounds	3.2
Methanol	1.6
Toluene	0.8

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source No.</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
P006, P013 and P018	Sulfonation Systems AR-1; AR-2; and AR-3	VV

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- construction date (no later than 30 days after such date);
- anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- actual start-up date (within 15 days after such date); and
- date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, OH 43216-3669

and OEPA Central District Office - DAPC
3232 Alum Creek Drive,
Columbus, Ohio 43207-3417

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to OEPA Central District Office - DAPC, 3232 Alum Creek Drive, Columbus, Ohio 43207-3417.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the OEPA Central District Office - DAPC, 3232 Alum Creek Drive, Columbus, Ohio 43207-3417.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the

shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. The permittee shall not complete more than two (2) batches of toluenesulfonic acid (TSA), phenolsulfonic acid (PSA) or paratertiary octophenol (PTO) in each of the emissions units P006, P013 and P018 in any 24-hour day. The permittee shall not complete more than 60 batches in any monthly period nor more than 730 batches of TSA, PSA and PTO in each emissions unit during any rolling 12-month period.
2. The permittee shall not complete more than five (5) batches of acid blends in emissions unit P018 in any 24-hour day. The permittee shall not complete more than 152 batches in any monthly period nor more than 1,825 batches during any rolling 12-month period.
3. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be greater than 100 degrees Fahrenheit during production of toluenesulfonic acid (TSA), phenolsulfonic acid (PSA) and paratertiary octophenol (PTO).
4. The permittee shall vent all process stack emissions from each emissions unit to an activated carbon canister that achieves a 50 percent reduction in VOC concentration during sulfonating and acid blending processes. The outlet gases from the activated carbon shall be monitored monthly with currently approved OVA 108 monitor or a Method 21 compliant device, approved for use in the Leak Detection and Repair (LDAR) plan. The activated carbon shall be replaced whenever the outlet gas concentration exceeds an action level of 1,000 ppm as readout on OVA

108, or equivalent ppm as carbon using a different Method 21 compliant device during methanol charge for acid blending or vacuum strip during toluene sulfonic acid production.

B. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day during which acid sulfonating and blending occurs:
 - a. the identification of each emissions unit in service;
 - b. the identification and completion date of each product batch for each emissions unit;
 - c. the number of batches of PSA, TSA, and PTO completed in each emissions units during each 24-hour period;
 - d. the number of batches of acid blends completed in P018 during each 24-hour period;
 - e. during the first working day of each month, a summation of the number of batches of TSA, PSA and PTO completed during the previous monthly period and previous rolling 12-month period for emission unit; and,
 - f. during the first working day of each month, a summation for P018 of the number of batches of acid blends completed during the previous monthly period and previous rolling 12-month period.
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units of measurement shall be in degrees Fahrenheit. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature measured of ± 5 degrees Fahrenheit, whichever is greater.
3. The permittee shall collect and record the following information each day:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases from the condenser exceeds 100 degrees Fahrenheit, when the emissions unit is in operation; and,

temperature of the exhaust gases from the condenser exceeds 100 degrees Fahrenheit. The permittee shall submit a written report within 45 days following the excursion that identifies the date, time of day, the emissions unit, the identification of the batch, and the duration of the excursion.

2. The permittee shall submit quarterly reports to the Central District Office which documents any exceedances of the emission limits set forth in terms A.1., A.2., and A.3. for the previous three calendar months (October 1 through December 31, January 1 through March 31, April 1 through June 30, and July 1 through September 30, respectively). The reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall provide a summary of the recordkeeping required by terms B.2. and B.5. for each reported exceedance.

D. Testing Requirements

1. Compliance with the emission limitations shall be determined in accordance with the following method(s):

- a. Limitation for toluene during acid sulfonation for each emission unit

0.35 pound toluene/hour
0.28 ton toluene/year.

Applicable Compliance Method

Outlet concentration at less than 1,000 ppm, as readout on Method 21 compliant device, from carbon canister during TSA vacuum strip phase.

Recordkeeping for batches completed at 0.76 pound/batch during 365 days/year.

- b. Limitation for methanol during acid blending process in P018:

1.1 pounds methanol/hour
1.4 tons methanol/year.

Applicable Compliance Method

Outlet concentration less than 1,000 ppm, as readout on method 21 compliant device, from carbon canister during methanol charge.

Recordkeeping for batches completed at 1.55 pound/batch during 365 days/year.

Summary of Emission Data and Compliance Methods

<u>Product</u>	<u>Batch Time (Hours)</u>	<u>Pollutant</u>	<u>Pounds /Hour</u>	<u>Pounds /Batch</u>	<u>Pounds /Year</u>	<u>Tons/ Year</u>	<u>Compliance Basis</u>
TSA	30	toluene	0.35	0.76	554.8	0.277	Monitoring/Record (1)
PSA	18	methanol	0.22	0.34	248.2	0.124	Calculation/Record (1)
PTO	10	diisobutyl	0.72	0.72	525.6	0.262	Calculation/Record (1)
Blend	4	methanol	1.1	1.55	2,829	1.4	Monitoring/Record (2)
Blend	4	isopropyl	0.7	1.35	2,464	1.2	Calculation/Record (2)

(1) Based on 2 batches/day for each emissions unit during 365 days/year.

(2) Based on 5 batches/day in P018 during 365 days/year.

E. Federal Enforceability

- The following terms and conditions have been incorporated into this permit in order to establish federally enforceable limitations on potential to emit: A.1., A.2., A.3., A.4., B.1., and B.4.