



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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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

12/3/2008

MICHAEL DESGRANGES  
CAPITAL RESIN CORP  
324 DERING AVE  
COLUMBUS, OH 43207

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0125040238  
Permit Number: P0082685  
Permit Type: Renewal  
County: Franklin

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

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

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc), from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO 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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: Ohio EPA-CDO

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install and Operate  
for  
CAPITAL RESIN CORP**

Facility ID: 0125040238  
Permit Number: P0082685  
Permit Type: Renewal  
Issued: 12/3/2008  
Effective: 12/3/2008  
Expiration: 10/9/2013





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Permit-to-Install and Operate**  
for  
**CAPITAL RESIN CORP**

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**Final Permit-to-Install and Operate**

**Permit Number:** P0082685

**Facility ID:** 0125040238

**Effective Date:** 12/3/2008

## Authorization

Facility ID: 0125040238

Application Number(s): A0013014

Permit Number: P0082685

Permit Description: Resin reactor R 5 (4,000-gallon) w/condenser and steam jacketed vacuum dryer  
w/condenser (1,000- gallon) for acetoguanamine resin production

Permit Type: Renewal

Permit Fee: \$0.00

Issue Date: 12/3/2008

Effective Date: 12/3/2008

Expiration Date: 10/9/2013

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

CAPITAL RESIN CORP  
324 DERING AVENUE  
COLUMBUS, OH 43207

of a Permit-to-Install and Operate 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, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0082685

**Facility ID:** 0125040238

**Effective Date:** 12/3/2008

## Authorization (continued)

Permit Number: P0082685

Permit Description: Resin reactor R 5 (4,000-gallon) w/condenser and steam jacketed vacuum dryer w/condenser (1,000- gallon) for acetoguanamine resin production

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>P012</b>
Company Equipment ID:	R-5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



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**Final Permit-to-Install and Operate**

**Permit Number:** P0082685

**Facility ID:** 0125040238

**Effective Date:** 12/3/2008

## **A. Standard Terms and Conditions**



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

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**Effective Date:** 12/3/2008

change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



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## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0082685

**Facility ID:** 0125040238

**Effective Date:** 12/3/2008

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.



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**Effective Date:** 12/3/2008

## **C. Emissions Unit Terms and Conditions**



**1. P012, R-5**

**Operations, Property and/or Equipment Description:**

Reactor R-5 for acetoguanamine production

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

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) (01-08730)	Organic compound (OC) emissions shall not exceed 2.45 lbs/hr and 1.89 tons per year.  See b)(2)a, b)(2)b, b)(2)c, c)(1) and c)(2) below.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-07(G) and 3745-17-08(B).
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and MACT requirements)	Acetonitrile emissions shall not exceed 8.67 lbs/batch and 1.64 tons per rolling, 12-month period.  See b)(2)d, and c)(3) below.
c.	OAC rule 3745-21-07(G)(2)	See b)(2)e, below
d.	OAC rule 3745-17-08(B)	See b)(2)f, below.



(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures (BACM) sufficient to eliminate visible emissions of fugitive particulate emissions by charging solids within an enclosed room passively vented inside the building.
- b. 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.

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.

- c. Based on formulation data and emission testing, acetonitrile and glycol ether PM represent the total OC and HAP emissions from this emissions during the production of acetoguanamine resin .
- 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(D) are as follows for the emissions units listed in section d)(3) below:
  - i. the facility-wide individual HAP and total HAP emissions shall not exceed 9.9 tons and 24.9 tons as a rolling, 12-month summation, respectively, and
  - ii. the facility-wide total OC emissions shall not exceed 99.9 tons as a rolling, 12-month summation.

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.

<sup>1</sup>A 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.

- e. The requirements established under OAC rule 3745-21-07 shall cease to be effective and federally enforceable on the date the U.S. EPA approves the current rule as a revision to the Ohio SIP for the control of organic compounds.
- f. The control requirement specified by this rule are less stringent than the control requirement established pursuant to OAC rule 3745-31-05(A)(3).



c) Operational Restrictions

- (1) The temperature of the exhaust gases from the condenser on the reactor shall not exceed 77 degrees Fahrenheit.
- (2) The temperature of the exhaust gases from the condenser on the dryer shall not exceed 75 degrees Fahrenheit.
- (3) The permittee shall not produce more than 30 batches of acetoguanamine resin during any month.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record the temperature of the exhaust gases from the condensers on the reactor and dryer 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  $\pm 1$  percent of the temperature being measured or  $\pm 5$  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.

The permittee shall collect and record the following information each day of resin production:

- a. the temperature of the exhaust gases from the reactor and dryer condensers ; and
  - b. a log or record of downtime for the condensers and/or temperature monitoring equipment when this emissions unit was in operation.
- (2) The permittee shall collect and record the following information for each month for this emissions unit:
    - a. the number of batches produced;
    - b. the total acetonitrile emissions, in pounds or tons; and
    - c. the rolling, 12-month summation of the acetonitrile emissions, in pounds or tons.
  - (3) The permittee shall collect and record the following information for each month for the facility:
    - a. the individual HAP emissions for each emissions unit at this facility, in pounds or ton(s);
    - b. the total combined HAP emissions for each emissions unit at this facility, in pounds or ton(s);
    - c. the individual HAP emissions for all emissions units at this facility, in pounds or tons;



- d. the total combined HAP emissions for all emissions units at this facility, in pounds or tons;
  - e. the rolling, 12-month summation of the individual HAP emissions for all emissions units at the facility, in tons (i.e., the value from the current month added to the summation of the individual HAP emissions from the previous 11 months);
  - f. the rolling, 12-month summation of the total combined HAP emissions for all emissions units at the facility, in tons (i.e., the value from the current month added to the summation of the total combined HAP emissions from the previous 11 months);
  - g. the OC emissions for each emissions unit at the facility, in pounds or tons;
  - h. the total OC emissions for all emissions units at the facility, in pounds or tons; and
  - i. the rolling 12-month summation of the OC emissions for all emissions units at the facility, in tons (i.e., the value from the current month added to the summation of the OC emissions from the previous 11 months).
- (4) The PTI application for this emissions unit P012, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e.,  $\Delta X$  hours per day and  $\Delta Y$  days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: Acetonitrile

TLV (mg/m<sup>3</sup>): 67

Maximum Hourly Emission Rate (lbs/hr): 2.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 655.6

MAGLC (ug/m<sup>3</sup>): 1,595

The permittee, has demonstrated that emissions of acetonitrile, from emissions unit(s) P012 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration $\Delta$ , the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the AToxic Air Contaminant Statute<sup>®</sup> 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- e) Reporting Requirements



- (1) The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. an identification of all periods of time during which the temperature of the exhaust gases from the reactor and dryer condensers exceeded the temperature limitations specified in terms B.1 and B.2, above ;
  - b. an identification of all exceedances of the monthly batch operational restriction in term B.3, above;
  - c. an identification of all exceedances of the rolling, 12-month individual and combined HAP emission limitations; and
  - d. an identification of all exceedances of the rolling, 12-month OC emission limitation.

These deviation (excursion) reports shall be submitted in accordance with the requirements specified in General Term and Condition A.2 of this permit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

- a. The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the <sup>A</sup>Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration in the annual PER. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section A.1. shall be determined in accordance with the following methods:

- a. Emissions Limitation:

OC emissions shall not exceed 2.45 lbs/hr.

Applicable Compliance Method:

This emission limitation was established by summing the maximum hourly emission rates of 2.25 lbs of acetonitrile and 0.195 lb of glycol ether PM determined through emission testing on December 17, 2002 while charging acetonitrile and blending with glycol ether PM. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests



performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18.

b. Emissions Limitation:

OC emissions shall not exceed 1.89 tons/yr.

Applicable Compliance Method:

This emission limitation was established by summing the batch emission rates of 8.67 lbs of acetonitrile and 1.19 lbs of glycol ether PM (9.86 lbs OC/batch) determined through emission testing on December 17, 2002 and multiplying the total OC batch emission rate by 360 batches per year. An additional 0.12 ton of OC/yr is generated as a working loss during transfer to storage tanks. Compliance with this emission limitation shall demonstrated based upon the record keeping requirements of this permit.

c. Emissions Limitation:

Acetonitrile emissions shall not exceed 8.67 lbs/batch.

Applicable Compliance Method:

This emission limitation was established by summing the hourly acetonitrile emission rates from the reactor and dryer associated with this emissions unit as determined through emission testing on December 17, 2002. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18.

d. Emissions Limitation:

Acetonitrile emissions shall not exceed 1.64 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established by multiplying the batch emission rate of 8.67 lbs of acetonitrile by 360 batches per year. An additional 0.08 ton of acetonitrile/yr is generated during transfer to storage tanks. Compliance with this emission limitation shall demonstrated based upon the record keeping requirements in d)(2)c of this permit.

e. Emissions Limitation:

The individual and combined HAP emissions shall not exceed 9.9 tons and 24.9 tons per rolling, 12-month period, respectively, from all emissions units at the facility.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements in d)(3)e and d)(3)f of this permit.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0082685

**Facility ID:** 0125040238

**Effective Date:** 12/3/2008

f. Emission Limitation:

The total OC emissions shall not exceed 99.9 tons per rolling, 12- month period from all emissions units at the facility.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements in d)(3)i of this permit.

g) Miscellaneous Requirements

(1) None.