



Environmental Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

Certified Mail

1/26/2011

Melinda Rutledge  
International Paint LLC  
640 N. Rocky River Drive  
Berea, OH 44017

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1318067810  
Permit Number: P0105306  
Permit Type: Initial Installation  
County: Cuyahoga

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of 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 permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Plain Dealer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
122 South Front Street  
Columbus, Ohio 43215

and Cleveland Division of Air Quality  
2nd Floor  
75 Erieview Plaza  
Cleveland, OH 44114

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
CDAQ; Pennsylvania; Canada





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Blending/dispensing tank for paint manufacturing

3. Facility Emissions and Attainment Status:

Single HAP (Styrene) emissions were reported as 0.0792 tons and combined HAPs were reported as 0.0996 tons for 2009.

The potential to emit a single HAP (Styrene), operating 8760 hours per year exceeds the Title V major source threshold of 10.0 tons/yr.

The proposed facility allowable for K001 and P003-P009 combined is 9.9 TPY from a single HAP and 24.9 TPY from any combined HAPs, as a 12-month rolling limit.

Cuyahoga County is currently in non-attainment for only PM2.5

4. Source Emissions:

The facility will employ a catalytic incinerator which has a minimum control efficiency of 98% for VOC. Styrene makes up a maximum of 57.14% of the VOC emitted. The facility intends to show compliance through recordkeeping and reporting. In addition, VOC stack testing will be a requirement of the permit.

5. Conclusion:

Based on the projected emissions for the future the facility is close to exceeding the single HAP facility-wide emission for Styrene. Currently the facility has adopted a 57.14% Styrene emission factor to use to calculate single HAP and 85.71% for combined HAPs. Recordkeeping is crucial to making sure the facility does not exceed the major threshold limit for Title V.

6. Please provide additional notes or comments as necessary:



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Permit Strategy Write-Up**  
**Permit Number:** P0105306  
**Facility ID:** 1318067810

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	3.47 TPY (potential controlled)
VOC	5.42 TPY (potential controlled)
Single HAP (Styrene)	9.9 TPY (facility-wide)
Combined HAP	24.9 TPY (facility-wide)

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
International Paint LLC

Issue Date: 1/26/2011

Permit Number: P0105306

Permit Type: Initial Installation

Permit Description: Initial FEPTIO for a paint/blending unit. The emissions source has the same process as the P003-P009 and will be controlled by a baghouse filter and catalytic incinerator.

Facility ID: 1318067810

Facility Location: International Paint LLC  
640 NORTH ROCKY RIVER DR.,  
BEREA, OH 44017

Facility Description: Paint and Coating Manufacturing

Scott J. Nally, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to David Hearne at Cleveland Division of Air Quality, 2nd Floor 75 Erieview Plaza, Cleveland, OH 44114 or (216)664-2297. The permit can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)



**Ohio**

**Environmental  
Protection Agency**

**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
International Paint LLC**

Facility ID:	1318067810
Permit Number:	P0105306
Permit Type:	Initial Installation
Issued:	1/26/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Permit-to-Install and Operate
for
International Paint LLC

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? ..... 4
3. What records must I keep under this permit? ..... 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
7. What reports must I submit under this permit? ..... 5
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? ..... 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 5
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
13. Can I transfer this permit to a new owner or operator?..... 6
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 6
15. What happens if a portion of this permit is determined to be invalid? ..... 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions ..... 12
1. P009, Paint Mixing Station ..... 13



## Authorization

Facility ID: 1318067810

Application Number(s): A0038118

Permit Number: P0105306

Permit Description: Initial FEPTIO for a paint/blending unit. The emissions source has the same process as the P003-P009 and will be controlled by a baghouse filter and catalytic incinerator.

Permit Type: Initial Installation

Permit Fee: \$400.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 1/26/2011

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

International Paint LLC  
640 NORTH ROCKY RIVER DR.  
BEREA, OH 44017

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:

Cleveland Division of Air Quality  
2nd Floor  
75 Erieview Plaza  
Cleveland, OH 44114  
(216)664-2297

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

Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0105306

Permit Description: Initial FEPTIO for a paint/blending unit. The emissions source has the same process as the P003-P009 and will be controlled by a baghouse filter and catalytic incinerator.

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>P009</b>
Company Equipment ID:	Paint Mixing Station
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



## **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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 Cleveland Division of Air Quality 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<sup>1</sup> 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 emissions 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 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

---

<sup>1</sup> Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

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



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).

(1) 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.

a. 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) c)(1)-(2), e)(1), f)(1), and g)(1)-(2)

c) 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(D)(1) To avoid Title V and MACT subpart HHHHH	See c)(2)

(2) Additional Terms and Conditions

a. The emissions of Hazardous Air Pollutants (HAPs) from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY from any combination of HAPs, based on a rolling, 12-month summation of the monthly HAP material usage rates.

b. The facility-wide emission limit shall include emissions from the following units: K001, P003, P004, P005, P006, P007, P008, and P009.

d) Operational Restrictions

(1) None.

e) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for all materials employed containing any hazardous air pollutants (HAPs) for the entire facility:

a. the name and identification number/code of each material containing any HAP;

b. the name of each individual HAP contained in each material employed (and identified in (a) above) and the pound(s) of each HAP per gallon of each HAP-containing material applied;

- c. the number of gallons of each material employed during the month;
- d. for each individual HAP, the total uncontrolled emissions from all the materials employed, in ton(s), i.e., for each individual HAP, the summation of the products of (b) times (c) for all the materials employed during the month, divided by 2,000 pounds;
- e. the total uncontrolled combined HAPs emissions from all the materials employed during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from (d) above;
- f. for P003, P004, P005, P006, P007, P008 and P009 each individual HAP, the calculated, controlled emission rate from all the materials employed, in ton(s), i.e., the total uncontrolled individual HAP emission rate calculated in (d) above, multiplied by 1 minus the overall control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions unit was in compliance;
- g. for P003, P004, P005, P006, P007, P008 and P009 the calculated, controlled combined HAPs emission rate for all the materials employed, in ton(s), i.e., the uncontrolled total combined HAPs emission rate, calculated in (e) above, multiplied by 1 minus the overall control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions unit was in compliance;
- h. for each individual HAP, the total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in (d) for K001 and (f) above, for the present month plus the previous 11 months of operation, in ton(s); and
- i. the total combined HAP emissions during the rolling 12-month period, i.e., the summation of all HAP emissions, as recorded in (e) for K001 and (g) above, for the present month plus the previous 11 months of operation, in ton(s).

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). Material Safety Data Sheets (MSDS) typically include a listing of the solvents contained in the coatings and cleanup materials.

f) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for emissions units K001, P003, P004, P005, P006, P007, P008 and P009 combined that identify:
  - a. all exceedances of the rolling, 12-month individual HAP emission limitation for each HAP for all materials employed;
  - b. all exceedances of the rolling, 12-month total combined HAPs emission limitation for all materials employed;
  - c. the probable cause of each deviation (excursion);

- d. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- e. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by CDAQ.

g) Testing Requirements

- (1) Compliance with the emissions limitation(s) in Section c) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:  
Individual HAP emissions shall not exceed 9.9 tons per rolling, 12-month period for this facility.

Applicable Compliance Method:  
Compliance shall be determined by the recordkeeping and reporting specified in Sections e) and f).

- b. Emission Limitation:  
Combined HAP emissions shall not exceed 24.9 tons per rolling, 12-month period for this facility.

Applicable Compliance Method:  
Compliance shall be determined by the recordkeeping and reporting specified in Sections e) and f).

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



1. P009, Paint Mixing Station

Operations, Property and/or Equipment Description:

Blending/dispensing tank controlled with a baghouse and catalytic incinerator for paint manufacturing

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. d)(9)-(12), and e)(7)

(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. b)(1)b., b)(2)a., f)(1)b. and f)(1)f.

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), as effective 11/30/01	Particulate Emissions (PE) shall not exceed 0.38 lb/batch from the stack serving this emissions unit. Fugitive Particulate Matter (PM) shall not exceed 2.0 lbs/batch and 2.92 TPY. Volatile Organic Compounds (VOC) shall not exceed 1.46 lbs/batch from the stack serving this emissions unit. Fugitive VOC emissions shall not exceed 2.25 lbs/batch and 3.29 TPY. Visible Particulate emissions from the stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average. Visible emissions of fugitive dust shall not



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 5% opacity, as a three-minute average.</p> <p>See b)(2)a. and b)(2)b.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 17-07(B) and OAC rule 3745-17-11(B)(1).</p>
b.	<p>OAC rule 3745-31-05(D)</p> <p>To avoid Title V</p>	<p>PE from this emissions unit shall not exceed 0.55 tons per rolling 12 months from the stack serving this emissions unit.</p> <p>VOC shall not exceed 2.13 tons per rolling 12 months from the stack serving this emissions unit.</p> <p>See b)(2)a.</p>
c.	<p>OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06</p>	<p>See b)(2)c.</p>
d.	<p>OAC rule 3745-17-07(A)</p>	<p>Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.</p> <p>See b)(2)h.</p>
e.	<p>OAC rule 3745-17-07(B)(1)</p>	<p>Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a three-minute average.</p> <p>See b)(2)h.</p>
f.	<p>OAC rule 3745-17-08(B)(3)</p>	<p>Reasonable available control measures (RACM) must be employed to sufficiently minimize or eliminate visible emissions of fugitive dust. See b)(2)d.</p>
g.	<p>OAC rule 3745-17-11(B)(1)</p>	<p>PE shall not exceed 3.63 lbs/hr.</p> <p>See b)(2)h.</p>
h.	<p>ORC rule 3704.03(F)(4)(c)</p>	<p>See d)(9)-(12), and e)(7)</p>

- (2) Additional Terms and Conditions
- a. The emissions from this emissions unit shall be vented to:
- i. a baghouse whenever any one or more of the following air contaminant sources, P003, P004, P005, P006, P007, P008 and P009, are in operation, with a minimum capture efficiency of 95% and a minimum control efficiency of 99%, for PE; and
  - ii. a catalytic incinerator, whenever any one or more of the following air contaminant sources, P003, P004, P005, P006, P007, P008 and P009, are in operation, with a minimum capture efficiency of 97% and a minimum control efficiency of 98%, by weight for VOC.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of the 3745-31-05, then these emission limits/control measures no longer apply.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to this emissions unit since the controlled potential to emit for PE and VOC emissions are less than 10 tons per year taking into account the federally enforceable limits in b)(1)b. and the federally enforceable requirement to use the baghouse and catalytic incinerator at the efficiencies stated in b)(2)a..
- d. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from this emissions unit shall meet the following requirements:
- i. the collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- e. The Ohio Supreme Court's decision in Ashland Chemical Company v. Jones, 92 Ohio St. 3d 234, 2001-Ohio-184, ruled that the old OAC rule 3745-21-07(G) could not be applied to container filling operations (and by logical extension, to mixing operations), in which there is no chemical reaction occurring, because the operations are not "employing" any liquid organic materials.
- f. The emissions unit was installed after February 18, 2008.

- g. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

[b)(2)e.]

The emission limitations and control requirements from the amended 21-07 rule, and the associated operational restrictions and the monitoring, record keeping, and reporting requirements contained in this permit, shall become federally enforceable on the date the U.S. EPA approves the revised OAC rule 3745-21-07 as a revision to the Ohio State Implementation Plan. The following terms shall become federally enforceable after U.S. EPA approves the rule revision:

[b)(2)f.]

- h. Until such time the U.S. EPA approves Ohio's SIP, the more stringent or equivalent visible emissions and particulate limits established under OAC rule 3745-31-05(A)(3) shall apply. Upon Ohio's SIP approval, the rule based limits under OAC rule 3745-17-07(A), 3745-17-07(B) and 3745-17-11(B) shall go into effect.

c) Operational Restrictions

- (1) The permittee shall maintain the viability of the catalyst system by testing and replacing the catalyst as required in this permit. The longevity of the catalyst shall be determined through regulated sampling and testing of the material. The frequency of sampling and catalyst replacement shall be increased with failing or borderline test results; or the schedule may be adjusted or extended with the demonstration of continuous compliant test results.
- (2) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst, as determined in catalyst activity tests, shall be at least 98% at a test temperature that is equal to that temperature at which the inlet to the catalyst bed is set. Solvent loading during the catalyst activity tests shall be consistent with the test laboratory's normal testing protocol.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for P009:
  - a. the name and identification of each product produced;
  - b. the lbs of pigment per gallon for each product produced;
  - c. the density of each product used in lbs/gal;

- d. the number of gallons produced each batch;
  - e. the amount of controlled and fugitive VOC in pounds per batch using the equation(s) in f)(1)e. and f)(1)f. (volume and density shall be adjusted per batch as produced);
  - f. the number of hours for each batch; and
  - g. the number of batches produced each day.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable temperature of the exhaust gases immediately before the catalyst bed, during any period of time when the emissions unit(s) controlled by the catalytic incinerator is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance. The acceptable temperature difference across the catalyst bed (when the emissions unit(s) is/are in operation), shall not be less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.
- (3) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s), on daily basis, the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than three years.
- (4) The permittee shall perform a preventative maintenance inspection of the catalytic incinerator every six months to evaluate the performance of the catalyst bed. The permittee shall sample, test, and maintain records of the testing results of the viability and condition of the catalyst. Samples of the catalyst shall be collected either as a representative sample, taken from different layers of the bed/monolith; or may be taken as a single sample from the leading edge of the bed, where it is first exposed to the process gas. The permittee shall maintain records of the following information for the catalyst:
- a. the date the catalyst sample is taken;
  - b. the sampling method; and if a representative sample, the number of samples and from which sample cores, layers, or levels taken;
  - c. the testing methods conducted for the VOC destruction efficiency and the level of contamination/poisoning (Si, P, Cl, etc.);
  - d. test results for the VOC destruction efficiency, level of contamination or poisoning, and surface area loss (all in %); and

- e. the date(s) of catalyst replacement; and if only partial, the amount or percent of the total catalyst replaced.

Frequency of sampling may be adjusted or reduced as compliant test data and the incinerator's site-specific catalyst replacement schedule is developed. The frequency of sampling shall be increased with any testing results showing a VOC destruction efficiency equal to or less than that required to maintain the control efficiency requirements contained in this permit.

Each inspection shall also include internal and visual inspections in accordance with the manufacturer's recommendations, and shall include a physical inspection of the unit and all of the associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment and the catalyst shall be performed as determined by the inspection.

The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator.

These records shall be maintained at the facility for a period of no less than three years.

- (5) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the bag house is between 1 to 6 inches of water.
- (6) The permittee shall inspect the baghouse for leaks and visible emissions of fugitive dust at least once a month during operation periods. Records of such inspections shall include at a minimum the date the inspection was conducted, any and all results obtained, any problems discovered, and any corrective action taken.
- (7) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the bag house when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the bag house on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (8) Whenever the monitored value(s) listed below deviate from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation.
  - a. deviations in the temperature of the exhaust gases immediately before the catalyst bed and/or the temperature difference across the catalyst bed; and/or
  - b. deviations in the established pressure drop across the baghouse.

The permittee shall maintain records of the following information for each investigation:

- c. the date and time the deviation began;
- d. the magnitude of the deviation at that time;

- e. the date the investigation was conducted;
- f. the name(s) of the personnel who conducted the investigation; and
- g. 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 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:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and/or
- f. the temperature of the exhaust gases immediately before the catalyst and the temperature difference across the catalyst bed immediately after the corrective action was implemented; and
- g. 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 ranges or limits on the pressure drop across the bag house and temperature ranges for the catalytic incinerator are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (CDAQ). The permittee may request revisions to the permitted limit or range for the pressure drop and/or temperature ranges for the catalytic incinerator based upon information obtained during future testing that demonstrate compliance with the allowable emission rates for the controlled emissions unit(s). In addition, approved revisions to the ranges or limits 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.

- (9) The federally enforceable permit-to-install and operate (FEPTIO) application for this/these emissions unit(s), P009, 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., "24" hours per day and "7" 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):

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

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

Toxic Contaminant: Styrene

TLV (mg/m<sup>3</sup>): 85.20

Maximum Hourly Emission Rate (lbs/hr): 0.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 337.20

MAGLC (ug/m<sup>3</sup>): 2029

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P009, 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 "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (10) 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", 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 "Toxic Air Contaminant Statute" 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 "Toxic Air Contaminant Statute", 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 FEPTIO 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.

- (11) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", 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 "Toxic Air Contaminant Statute", 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 "Toxic Air Contaminant Statute", 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 “Toxic Air Contaminant Statute”, 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.

- (12) 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 “Toxic Air Contaminant Statute”, 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.

e) Reporting Requirements

- (1) 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.
- (2) The permittee shall identify in the Annual PER the following information concerning the baghouse during the 12-month reporting period for this/these emissions unit(s):
  - a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;
  - b. an identification of each incident of deviation described in (a) 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 pressure drop 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 corrective action.
- (3) The permittee shall identify in the Annual PER any incidents during which the baghouse had any leaks or visible emissions of fugitive dust.
- (4) The permittee shall identify in the Annual PER summaries that identify all 3-hour blocks of time, when the emissions unit was in operation, during which:
  - a. the average temperature of the process vent stream immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance;

- b. the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance;
  - c. any records of downtime for the capture (collection) system, the catalytic incinerator, and/or the monitoring equipment when the emissions unit was in operation;
  - d. an identification of each incident of deviation described in (a), (b) and (c) above where a prompt investigation was not conducted;
  - e. an identification of each incident of deviation described in (a), (b) and (c) above where prompt corrective action, that would bring the field into compliance with the acceptable ranges and operation, was determined to be necessary and was not taken; and
  - f. an identification of each incident of deviation described in (a), (b) and (c) above where proper records were not maintained for the investigation and/or the corrective action.
- (5) The permittee shall submit summaries that identify any test results demonstrating that the VOC destruction efficiency of the catalyst was less than that required to maintain compliance with the total control efficiency requirements of this permit. This report shall include the date the non-compliant test results were received, the date the spent or poisoned catalyst was replaced, as well as, the hours of operation of the emissions unit between the catalyst sampling and its replacement. These reports shall be submitted within 45 days of all non-compliant tests.
- (6) The permittee shall also submit summaries that identify all periods of time, in which sample(s) of the catalyst were not collected and testing was not conducted at the most current frequency developed, monitored, and required in the catalyst maintenance plan; and/or records were not maintained for the catalyst system as required in this permit. These reports shall be submitted within 45 days of when the testing should have occurred.
- (7) 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 Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements
- (1) Compliance with the emission limitation(s) in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
- a. Emission Limitation:  
PE shall not exceed 0.38 lb/batch from the stack serving this emissions unit.

Applicable Compliance Method:

This emission limitation was based on the following equation:

$$E = (V) * (P) * (1 \text{ ton}/2000 \text{ lbs}) * (EF) * (CA) * (1-CE)$$

where,

E = emissions rate (lbs/batch)

V = volume (gallons/batch), 500 gal/batch

P = pigment concentration (lbs/gal), 8 lbs PE/gal maximum

EF = emission factor (lbs/ton), 20 lbs/ton of pigment handled, taken from AP 42 volume 1, 5<sup>th</sup> Edition, Chapter 6, Table 6.4-1

CA = amount captured by baghouse 95% = 0.95

CE = control efficiency of bag house 99% = 0.99

Compliance with the lbs PE/batch limitation shall be determined through the monitoring and recordkeeping requirements in section d)(1).

If required by the Ohio EPA or CDAQ, compliance with allowable particulate emissions limit shall be determined in accordance with U.S. EPA Reference Methods 1 through 5 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

PE shall not exceed 0.55 tons per rolling 12 months from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance with the annual emission limit can be determined by multiplying the lb PE/batch by the number of batches completed annually and dividing by 2000 lbs/ton.

Compliance with the annual PE emission limitation shall be determined through the monitoring and recordkeeping requirements in section d)(1).

c. Emission Limitation:

Fugitive PM shall not exceed 2.0 lbs/batch

Applicable Compliance Method:

This emission limitation was based on the following equation:

$$E = (V) * (P) * (1 \text{ ton}/2000 \text{ lbs}) * (EF) * (1-CA)$$

where,

E = emissions rate (lbs/batch)

V = volume (gallons/batch), 500 gal/batch

P = pigment concentration (lbs/gal), 8 lbs PE/gal maximum

EF = emission factor (lbs/ton), 20 lbs/ton of pigment handled, taken from AP-42 Volume 1, 5<sup>th</sup> Edition, Chapter 6, Table 6.4-1

CA = capture efficiency 95% = 0.95

Compliance with the lbs fugitive PM/batch limitation shall be determined through the monitoring and recordkeeping requirements in section d)(1).

- d. Emission Limitation:  
Fugitive PM shall not exceed 2.92 TPY

Applicable Compliance Method:

Compliance with the annual emission limit can be determined by multiplying the fugitive lbs PM/batch by the number of batches completed annually and dividing by 2000 lbs/ton.

Compliance with the annual fugitive PM emission limitation shall be determined through the monitoring and recordkeeping requirements in section d)(1).

- e. Emission Limitation:  
VOC emissions shall not exceed 1.46 lbs/batch from the stack serving this emissions unit.

Applicable Compliance Method:

This emission limitation was based on the following equation:

$$E = (V) * (D) * (1 \text{ ton}/2000 \text{ lbs}) * (EF) * (CA) * (1-CE)$$

where,

E = emissions rate (lbs/batch)

V = volume (gallons/batch), 500 gal/batch

D = density of coating (lbs/gal), 10 lbs/gallon

EF = emission factor (lbs/ton), 30 lbs/ton of paint, taken from AP-42 Volume 1, 5<sup>th</sup> Edition, Chapter 6, Table 6.4-1

CA = amount captured by baghouse 97% = 0.97

CE = control efficiency of bag house 98% = 0.98

Compliance with the allowable VOC limit shall be determined in accordance with U.S. EPA Reference Methods 1 through 4 and 25 or 25 A as applicable, of 40 CFR Part 60, Appendix A as specified in f)(3).

- f. Emission Limitation:  
VOC emissions shall not exceed 2.13 tons per rolling 12 months from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be determined by summing the VOC from each batch for the 12-month period as required in the monitoring and recordkeeping requirements in section d)(1) and dividing by 2000 lbs/ton.

g. Emission Limitation:

Fugitive VOC emissions shall not exceed 2.25 lbs/batch

Applicable Compliance Method:

This emission limitation was based on the following equation:

$$E = (V) * (D) * (1 \text{ ton}/2000 \text{ lbs}) * (EF) * (1-CA)$$

where,

E = emissions rate (lbs/batch)

V = volume (gallons/batch), 500 gal/batch

D = density of coating (lbs/gal), 10 lbs/gal

EF = emission factor (lbs/ton), 30 lbs/ton of paint, taken from AP-42 Volume 1, 5<sup>th</sup> Edition, Chapter 6, Table 6.4-1

CA = capture efficiency 97% = 0.97

Compliance with the lbs fugitive VOC/batch limitation shall be determined through the monitoring and recordkeeping requirements in section d)(1).

h. Emission Limitation:

Fugitive VOC emissions shall not exceed 3.29 TPY

Applicable Compliance Method:

Compliance with the annual fugitive VOC emission limitation shall be determined by summing the VOC from each batch for the year as required in the monitoring and recordkeeping requirements in section d)(1) and dividing by 2000 lbs/ton.

i. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20% opacity as a six-minute average, except as specified by rule; and visible particulate emissions of fugitive dust shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

j. Emission Limitation:

PE shall not exceed 3.63 lbs/hr

Applicable Compliance Method:

If required by the Ohio EPA or CDAQ, compliance with allowable particulate emissions limit shall be determined in accordance with U.S. EPA Reference Methods 1 through 5 of 40 CFR Part 60, Appendix A.

- (2) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the semi-annual inspections described in this permit. An "Intent to Test" notification shall not be required for catalyst activity testing. The procedures for the catalyst activity test shall be conducted in accordance with the manufacturer's recommendations and as required by the appropriate test method.
- (3) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after final issuance of the permit and 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC, in the appropriate averaging period(s) and overall control efficiency limitation for VOC.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 25 or 25A, as applicable, of 40 CFR Part 60, Appendix A, as appropriate.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CDAQ.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CDAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CDAQ's refusal to accept the results of the emission test(s).
- f. Personnel from the CDAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the



operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the CDAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CDAQ.

g) **Miscellaneous Requirements**

- (1) None.