



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

6/15/2016

Certified Mail

John Munsch
 Ball Metal Food Container LLC
 9300 W 108TH CIRCLE
 Broomfield, CO 80021

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0125041920
 Permit Number: P0120140
 Permit Type: Initial Installation
 County: Franklin

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-CDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Ball Metal Food Container LLC**

Facility ID:	0125041920
Permit Number:	P0120140
Permit Type:	Initial Installation
Issued:	6/15/2016
Effective:	6/15/2016
Expiration:	8/31/2020



Division of Air Pollution Control
Permit-to-Install and Operate
for
Ball Metal Food Container LLC

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Final Permit-to-Install and Operate
Ball Metal Food Container LLC
Permit Number: P0120140
Facility ID: 0125041920
Effective Date: 6/15/2016

Authorization

Facility ID: 0125041920
Application Number(s): A0054988
Permit Number: P0120140
Permit Description: Initial installation of two (2) metal sheet coating lines.
Permit Type: Initial Installation
Permit Fee: \$400.00
Issue Date: 6/15/2016
Effective Date: 6/15/2016
Expiration Date: 8/31/2020
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Ball Metal Food Container LLC
2690 Charter Street
Columbus, OH 43228

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

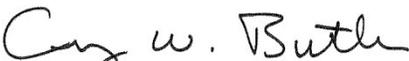
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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


Craig W. Butler
Director



Final Permit-to-Install and Operate
Ball Metal Food Container LLC
Permit Number: P0120140
Facility ID: 0125041920
Effective Date: 6/15/2016

Authorization (continued)

Permit Number: P0120140

Permit Description: Initial installation of two (2) metal sheet coating lines.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Group Name: Roll Coaters

Emissions Unit ID:	K007
Company Equipment ID:	Tandem Sheet Coating Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K008
Company Equipment ID:	Single Sheet Coating Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Ball Metal Food Container LLC
Permit Number: P0120140
Facility ID: 0125041920
Effective Date: 6/15/2016

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 of this permit 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 [DO/LAA] 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 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.



Final Permit-to-Install and Operate
Ball Metal Food Container LLC
Permit Number: P0120140
Facility ID: 0125041920
Effective Date: 6/15/2016

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).
 - 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) 2. through 6.
2. In accordance with OAC rule 3745-31-05(D), to avoid MACT and Title V, the emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units **K001, K002, K003, K004, K005, K007, K008**, all de minimis emissions units as defined in OAC rule 3745-15-05, and all registration status, permit exempt, and permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 9.9 tons per rolling, 12-month period for any individual HAP and 24.9 tons per rolling, 12-month period for any combination of HAPs.
3. Operational Restrictions
 - a) None.
4. Monitoring and Recordkeeping Requirements
 - a) The permittee shall maintain monthly records of the following information:
 - (1) the company identification for each coating employed in emissions units **K001, K002, K003, K004, K005, K007, and K008**;
 - (2) the number of gallons of each coating employed in emissions units **K001, K002, K003, K004, K005, K007, and K008**;
 - (3) the individual HAP content and combined HAPs content of each coating material employed in emissions units **K001, K002, K003, K004, K005, K007, and K008**, in pounds per gallon;
 - (4) the total uncontrolled emissions of each individual HAP and of combined HAPs from all de minimis emissions units as defined in OAC rule 3745-15-05, and all registration status, permit exempt, and permit-by-rule emissions units pursuant to OAC rule 3745-31-03, in tons, calculated in accordance with B.6.a)(2) below;
 - (5) the facility-wide individual HAP emissions, in tons per month;
 - (6) the facility-wide combined HAPs emissions, in tons per month;
 - (7) the rolling, 12-month summation (i.e., the current month plus the previous 11 months) of facility-wide individual HAP emissions, in tons; and

- (8) the rolling, 12-month summation (i.e., the current month plus the previous 11 months) of facility-wide combined HAPs emissions, in tons.

5. Reporting Requirements

- a) The permittee shall submit quarterly deviation (excursion) reports that identify:
- (1) all deviations (excursions) of the following emissions limitations, operational restrictions, and/or control device operating parameter limitations that restrict the potentials to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping, and/or testing requirements in this permit:
 - a. all exceedances of the rolling, 12-month facility-wide individual HAP emissions limitation; and
 - b. all exceedances of the rolling, 12-month facility-wide combined HAPs emissions limitation.
 - (2) the probable cause of each deviation (excursion).
 - (3) any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions).
 - (4) 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 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 the director (Ohio EPA, Central District Office).

6. Testing Requirements

- a) Emissions Limitation:
In accordance with OAC rule 3745-31-05(D), to avoid MACT and Title V, the emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units **K001, K002, K003, K004, K005, K007, K008**, all de minimis emissions units as defined in OAC rule 3745-15-05, and all registration status, permit exempt, and permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 9.9 tons per rolling, 12-month period for any individual HAP and 24.9 tons per rolling, 12-month period for any combination of HAPs.
- Applicable Compliance Method:
- (1) For emissions units **K001, K002, K003, K004, K005, K007, and K008**, compliance with these limitations is determined using recordkeeping required by B.4.a) above and using U.S. EPA approved emissions factors or emissions factors otherwise approved by Central District Office.
 - (2) For all de minimis emissions units as defined in OAC rule 3745-15-05, and all registration status, permit exempt, and permit-by-rule emissions units pursuant to OAC rule 3745-31-03, the permittee shall calculate HAP emissions consistent with the information presented in the installation and/or operating permit application using U.S. EPA approved emissions factors or emissions factors otherwise approved by Central District Office.



Final Permit-to-Install and Operate
Ball Metal Food Container LLC
Permit Number: P0120140
Facility ID: 0125041920
Effective Date: 6/15/2016

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Roll Coaters: K007 and K008

EU ID	Operations, Property and/or Equipment Description
K007	2 metal sheet coaters in series, each with a permanent total enclosure (PTE) and each vented to its own thermal incinerator/curing oven
K008	Metal sheet coating line with permanent total enclosure (PTE) vented to its own thermal incinerator/curing oven

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)(11) through d)(13), and e)(6)

(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)e., b)(2)d., c)(2) through c)(5), d)(2) through d)(7), d)(9), e)(3), f)(1), f)(2)i., and f)(2)j.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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 3745-17-07(A)	Visible particulate emissions from the stacks serving these emissions units shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(B)(1)	Emissions of particulate matter (PM) from the ovens shall not exceed 0.020 pound per million Btu of actual heat input.
c.	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(U)(1)	The VOC reduction requirements established by this rule are less stringent than the VOC reduction requirements established pursuant to OAC rule 3745-31-05(D).
d.	OAC rule 3745-31-05(A)(3)	Emissions from the combustion of natural gas in the curing ovens/thermal

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>incinerators serving these emissions units shall not exceed the following:</p> <p>For K007, emissions of carbon monoxide (CO) shall not exceed 0.61 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of CO shall not exceed 0.31 ton per month, averaged over a 12-month rolling period.</p> <p>For K007, emissions of nitrogen oxides (NO_x) shall not exceed 0.73 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of NO_x shall not exceed 0.37 ton per month, averaged over a 12-month rolling period.</p> <p>For K007, emissions of volatile organic compounds (VOC) shall not exceed 0.04 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of VOCs shall not exceed 0.02 ton per month, averaged over a 12-month rolling period.</p> <p>For K007, emissions of particulate matter less than 10 microns in diameter (PM₁₀) shall not exceed 0.056 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of PM₁₀ shall not exceed 0.028 ton per month, averaged over a 12-month rolling period.</p> <p>For K007, emissions of particulate matter less than 2.5 microns in diameter (PM_{2.5}) shall not exceed 0.056 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of PM_{2.5} shall not exceed 0.028 ton per month, averaged over a 12-month rolling period.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>For K007, emissions of sulfur dioxide (SO₂) shall not exceed 0.004 ton per month, averaged over a 12-month rolling period.</p> <p>For K008, emissions of SO₂ shall not exceed 0.002 ton per month, averaged over a 12-month rolling period.</p> <p>The requirements for OAC rule 3745-31-05(A)(3) for VOC emissions from coatings and clean-up materials shall be equivalent to the rolling, 12-month VOC emissions limitation established under OAC rule 3745-31-05(D).</p> <p>See b)(2)a. through b)(2)c. below.</p>
e.	OAC rule 3745-31-05(D) Federally Enforceable limitations to avoid Title V and MACT	<p>VOC emissions from coatings and clean-up materials employed in emissions units K007 and K008 combined, shall not exceed 43.68 tons per rolling, 12-month period.</p> <p>See B.2. through B.6. above, and b)(2)d. and c)(2) through c)(5) below.</p>
f.	ORC 3704.03(F)(4)	See d)(11) through d)(13), and e)(6) below.

(2) Additional Terms and Conditions

- a. The emissions limitations associated with the natural gas combustion in the curing ovens/thermal incinerators serving these emissions units have been established to reflect the potentials-to-emit for each pollutant. It is not necessary to establish monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.
- b. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that Best Available Technology (BAT) is no longer required by state regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, paragraph (A)(3)(a)(ii) of OAC rule 3745-31-05 (the less than 10 tons per year BAT exemption) has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-31-05(A)(3)(a)(ii), the requirement to satisfy BAT for

pollutant(s) less than 10 tons per year still exists as part of the federally-approved SIP.

- c. The following rule paragraph will apply when U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the SIP:
 - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, NO_x, PM₁₀, PM_{2.5}, and SO₂ emissions from this air contaminant source because the potentials to emit for CO, NO_x, PM₁₀, PM_{2.5}, and SO₂ emissions are less than 10 tons per year.
- d. The permanent total enclosures (PTE) serving these emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all of the VOC emissions from this emissions unit.

The PTE shall be constructed to totally enclose the application stations, coating reservoirs, and all areas from the application station to the oven and the control device, such that 100% of volatile organic compound emissions are captured, contained, and directed to the control device.

The PTE shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 in. H₂O), whenever the emissions units are in operation.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) VOC emissions from the application of coatings shall be vented to a thermal incinerator achieving an overall control efficiency of at least 98.5%.
- (3) The maximum VOC content of coatings and clean-up materials employed in emissions units **K007** and **K008**, combined, shall be limited by the following equation such that emissions do not exceed 43.68 tons on a rolling, 12-month basis:

$$43.68 \text{ tons} \geq \sum_{j=1}^m \left(\sum_{i=1}^n \frac{(U_{ij})(VOC_{ij}) (1 - (DE_j)(CE_j))}{2,000 \frac{lb}{ton}} + \sum_{l=1}^q \frac{(U_{lj})(VOC_{lj})}{2,000 \frac{lb}{ton}} \right) - \sum_{k=1}^p \frac{(R_k)(VOC_k)}{2,000 \frac{lb}{ton}}$$

Where:

U_{ij} = volume of coating i (gallons) used in emissions unit j;

VOC_{ij} = VOC content of coating i (lb/gal) used in emissions unit j;

DE_j = destruction efficiency for emissions unit j;

CE_j = capture efficiency for emissions unit j;

U_{ij} = volume of clean-up material I (gallons) used in emissions unit j;

VOC_{ij} = VOC content of clean-up material I (lb/gal) used in emissions unit j;

R_k = recovered clean-up material k (gallons); and

VOC_k = VOC content of recovered clean-up material k (lb/gal).

- (4) The usage of coating materials for emissions units **K007** and **K008**, combined, shall not exceed 806,142 gallons per rolling, 12-month period.

To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the coating usage levels specified in the following table:

Month(s)	Maximum Allowable Coating Usage (gallons)
1	67,178.5
1 - 2	134,357
1 - 3	201,535.5
1 - 4	268,714
1 - 5	335,892.5
1 - 6	403,071
1 - 7	470,249.5
1 - 8	537,428
1 - 9	604,606.5
1 - 10	671,785
1 - 11	738,963.5
1 - 12	806,142

- (5) The usage of clean-up materials for emissions units **K007** and **K008**, combined, shall not exceed 1,789 gallons per rolling, 12-month period. Calculation of usage of clean-up materials shall be calculated as prescribed in d)(9) below.

To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the clean-up material usage levels specified in the following table:

Month(s)	Maximum Allowable Clean-up Material Usage (gallons)
1	149.08
1 - 2	291.16
1 - 3	447.24
1 - 4	596.32
1 - 5	745.4
1 - 6	894.48
1 - 7	1,043.56
1 - 8	1,192.64
1 - 9	1,341.72
1 - 10	1,490.8
1 - 11	1,639.88
1 - 12	1,789

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas in the curing ovens/thermal incinerators serving these emissions units, the permittee shall maintain a record of the type and quantity of fuel burned.
- (2) In order to maintain compliance with the applicable emissions limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerators, for any 3-hour block of time when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be outside of the range specified by the manufacturer and/or 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.
- (3) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperatures within each of the thermal incinerators when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed,

calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal incinerator was/were in operation, during which the average combustion temperature within the thermal incinerator was 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; and
 - b. a log or record of the operating time for the capture (collection) system, thermal incinerator, monitoring equipment, and the associated emissions unit(s).
- (4) Whenever the monitored average combustion temperature within the thermal incinerator deviates from the range or limit established in accordance with this permit while emissions unit **K007** and/or **K008** is in operation, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

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

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (5) The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Central District Office. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (6) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
 - a. the measured diameter of each natural draft opening;
 - b. the distance measured from each natural draft opening to each VOC emitting point;
 - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
 - d. the calculation or demonstration that the distance from each VOC emitting point to each natural draft opening is at least four (4) times the diameter of the opening; and
 - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.
- (7) The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitors and records the differential pressure between the inside and outside of the permanent total enclosure when the emissions unit(s) is/are in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

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

- a. all three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and
- b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

- (8) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(8)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (9) The permittee shall collect and record the following information on a monthly basis for the coating and clean-up materials applied in these emissions units for the purpose of demonstrating compliance with the federally enforceable restrictions on VOC emissions:
- a. the name and identification number of each coating, as applied;
 - b. the name and identification number of each clean-up material, as applied;
 - c. the number of gallons of each coating, as applied;
 - d. the number of gallons of each clean-up material, as applied;
 - e. the mass of VOC per volume (VOC content) of each coating, as applied, in pounds per gallon;
 - f. the VOC content of each clean-up material employed, in pounds per gallon;
 - g. the calculated, uncontrolled VOC emissions from all coatings, as applied;
 - h. the calculated, total VOC emissions from all clean-up materials, as applied;
 - i. the calculated, controlled VOC emissions from all coatings, as applied;

- j. the rolling, 12-month coating usage from emissions units **K007** and **K008** combined, in gallons;
- k. the rolling, 12-month clean-up material usage from emissions units **K007** and **K008** combined, in gallons;
- l. the calculated, controlled, rolling, 12-month summation of the total VOC emissions from coating and clean-up usage from emissions units **K007** and **K008** combined, in tons, using the overall control efficiency, as determined for the thermal incinerator(s) during the most recent emissions test that demonstrated that the emissions unit(s) was/were in compliance for VOC emissions from coating usage; and
- m. if clean-up materials are collected for off-site disposal and/or recovery, the following records shall be maintained if a credit is to be applied to the monthly VOC emissions and clean-up materials usage records:
 - i. the amount of clean-up material recovered during the month* for off-site disposal and/or recovery, in gallons (or pounds, if records of recovered clean-up material is maintained by weight and VOC content in percent by weight);
 - ii. the VOC content of the recovered clean-up material shall be based on the lowest VOC content of any clean-up material collected, in pounds per gallon (or percent by weight); or it may be based upon a laboratory analysis provided by the facility to which the waste solvent is shipped;
 - iii. the date the recovered clean-up material was shipped, the amount shipped (minus the container), and the name and address of the receiving, disposal, and/or recovery facility;
 - iv. the total monthly clean-up material usage, in gallons, i.e. [d](9)d.] – [d](9)m.i.]; and
 - v. the total monthly VOC emissions from clean-up operations, in pounds, i.e., [d](9)h.] – [d](9)m.i. x d](9)m.ii.].

*A daily log may be required for recovered waste clean-up solvents, where a record of the monthly total volume or weight of the collected material cannot be accurately maintained. This amount shall be adjusted if the volume or weight shipped is less than the sum of the monthly recovered solvent added to the container.

- (10) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutants (HAPs)¹ that are applied in the emissions unit:
 - a. the name and identification number/code of each coating, thinner, additive, clean-up material, and any other material containing any HAP;

- b. the name/identification of each individual HAP contained in each material applied (and identified in d)(10)a. above) and the pound(s) of each HAP per gallon of each HAP-containing material applied;
- c. the number of gallons of each coating, thinner, additive, clean-up material, and other material applied during the month;
- d. for each individual HAP, the total uncontrolled emissions from the controlled coating operations for the month, in ton(s), i.e., for each individual HAP, the summation of the products of d)(10)b. times d)(10)c. for all the coatings, thinners, additives, and other materials (not including clean-up materials) applied during the month, where the emissions are captured and introduced to the control system, divided by 2,000 pounds;
- e. for each individual HAP, the total uncontrolled emissions from the clean-up materials employed, in ton(s), i.e., for each individual HAP, the summation of the products of d)(10)b. times d)(10)c. for all the clean-up materials applied during the month, divided by 2,000 pounds;
- f. the total uncontrolled combined HAPs emissions from the controlled operations for all the coatings, thinners, additives, and other materials (not including clean-up materials) applied during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from d)(10)d. above;
- g. the total uncontrolled combined HAPs emissions from all the clean-up materials applied during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from d)(10)e. above;
- h. for each individual HAP, the sum of (i) the calculated, controlled emission rate from all the coatings, thinners, additives, and other materials (not including clean-up materials) employed during the month, in ton(s), i.e., the total uncontrolled individual HAP emission rate calculated in d)(10)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, and (ii) the uncontrolled individual HAP emissions from the clean-up materials employed during the month, as calculated in d)(10)e. above;
- i. for combined HAPs, the calculated total combined HAPs emission rate for all the materials employed in the controlled coating and uncontrolled clean-up operations during the month, i.e., the summation of the total emissions of each of the individual HAP emission rates calculated in d)(10)h. above;
- j. for each individual HAP, the calculated total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in d)(10)h. above, for the present month plus the previous 11 months of operation, in ton(s); and
- k. the calculated total combined HAP emissions during the rolling 12-month period, i.e., the summation of all HAP emissions, as recorded in d)(10)i. above, for the present month plus the previous 11 months of operation, in ton(s).

¹A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting Ohio EPA, Central District Office. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings and clean-up materials.

(11) The application for these emissions units, **K007** and **K008**, were 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; modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, 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 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 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 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 "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m³): 467
Maximum Hourly Emission Rate (lb/hr): 5.52
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 205.47
MAGLC (µg/m³): 11,119

Toxic Contaminant: ethylbenzene
TLV (mg/m³): 93.5
Maximum Hourly Emission Rate (lb/hr): 1.17
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 43.55
MAGLC (µg/m³): 2,226

Toxic Contaminant: methyl isobutyl ketone
TLV (mg/m³): 88.2
Maximum Hourly Emission Rate (lb/hr): 0.72
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 26.80
MAGLC (µg/m³): 2,100

The permittee has demonstrated that emissions of xylene, ethylbenzene, and methyl isobutyl ketone from emissions units **K007** and **K008** are calculated to be less than eighty percent of the 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).

- (12) 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 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.

- (13) 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 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 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.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential-to-emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:
 - i. all 3-hour blocks of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the average combustion temperature within the thermal incinerator was outside of the range specified by the manufacturer and/or 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;
 - ii. any records of downtime (date and length of time) for the capture (collection) system, the thermal incinerator, and/or the monitoring equipment when the emissions unit(s) was/were in operation;
 - iii. a log of the operating time for the capture system, thermal incinerators, monitoring equipment, and the emissions unit(s);
 - iv. all 3-hour blocks of time, when the emissions unit(s) was/were in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water;
 - v. each rolling, 12-month period during which the VOC emissions from coatings and clean-up materials employed in emissions units **K007** and **K008**, combined, exceeded 43.68 tons;
 - vi. each month during which the VOC content of all coatings and/or clean-up materials applied in emissions units **K007** and **K008**, combined, exceeded the limit specified in c)(3) above;
 - vii. each time period during the first 12 months of operation during which the usage of coating materials for **K007** and **K008**, combined, exceeded the maximum allowable coating usage as listed in c)(4) above;
 - viii. each rolling, 12-month period after the first 12 months of operation during which the usage of coating materials for emissions units **K007** and **K008**, combined, exceeded 806,142 gallons;
 - ix. each time period during the first 12 months of operation during which the usage of clean-up materials for **K007** and **K008**, combined, exceeded the maximum allowable clean-up material usage as listed in c)(5) above; and
 - x. each rolling, 12-month period after the first 12 months of operation during which the usage of clean-up materials for emissions units **K007** and **K008**, combined, exceeded 1,789 gallons.
 - b. the probable cause of each deviation (excursion);

- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. 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 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 the Director (Central District Office).

- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (5) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term 1.d)(8) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
 - (6) 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 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) The permittee shall conduct, or have conducted, emissions testing for these emissions units in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after start-up.
 - b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation of 98.5% for VOC. The overall control efficiency (in percent) shall be the vapor capture efficiency multiplied by the vapor control efficiency and divided by one hundred.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emissions rate(s):

The VOC emission rate shall be determined using Methods 1 through 5 and 25 or 25A of 40 CFR Part 60, Appendix A.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

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 OAC rule 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. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the Ohio EPA, Central District Office. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), and control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst case" conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the Ohio EPA, Central District Office, that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe, in detail, the proposed test methods and procedures, the emissions unit's(s') 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 Ohio EPA's refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Central District Office, 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(s) and the testing procedures provide a valid characterization of the emissions from the emissions unit(s) 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 Ohio EPA, Central District Office, 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 Ohio EPA, Central District Office.
- (2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- Visible particulate emissions from the stack shall not exceed 20 percent opacity as a 6-minute average, except as specified by rule.
- Applicable Compliance Method:
- If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
- b. Emissions Limitation:
- Emissions of PM shall not exceed 0.020 pound per million Btu of actual heat input.
- Applicable Compliance Method:
- If required, compliance with the PM emissions limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.
- c. Emissions Limitation:
- Emissions of PM₁₀ shall not exceed 0.028 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.
- Emissions of PM₁₀ shall not exceed 0.056 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.
- Applicable Compliance Method:
- Compliance with the PM₁₀ emissions limitations is inherent based upon the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 3/98) emission factor of 7.6 lb/MMscf.
- $(7.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.028 \text{ tons per month, averaged over a rolling, 12-month period for K008}$

$[(7.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.056 \text{ tons per month, averaged over a rolling, 12-month period for K007}$

If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and 40 CFR Part 51, Appendix M, Methods 201 or 201A.

d. Emissions Limitation:

Emissions of $\text{PM}_{2.5}$ shall not exceed 0.028 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.

Emissions of $\text{PM}_{2.5}$ shall not exceed 0.056 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.

Applicable Compliance Method:

Compliance with the $\text{PM}_{2.5}$ emissions limitations is inherent based upon the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 3/98) emission factor of 7.6 lb/MMscf.

$(7.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.028 \text{ tons per month, averaged over a rolling, 12-month period for K008}$

$[(7.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.056 \text{ tons per month, averaged over a rolling, 12-month period for K007}$

If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and 40 CFR Part 51, Appendix M, Methods 201 or 201A.

e. Emissions Limitation:

Emissions of SO_2 shall not exceed 0.002 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.

Emissions of SO_2 shall not exceed 0.004 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.

Applicable Compliance Method:

Compliance with the SO_2 emissions limitations is inherent based upon the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 3/98) emissions factor of 0.6 lb/MMscf.

$(0.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.002 \text{ tons per month, averaged over a rolling, 12-month period for K008}$



$[(0.6 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.004 \text{ tons per month, averaged over a rolling, 12-month period for K007}$

If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

f. Emissions Limitation:

Emissions of CO shall not exceed 0.31 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.

Emissions of CO shall not exceed 0.61 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.

Applicable Compliance Method:

Compliance with the CO emissions limitations is inherent based on the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 3/98) emissions factor of 84 lb/MMscf.

$(84 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.31 \text{ tons per month, averaged over a rolling, 12-month period for K008}$

$[(84 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.61 \text{ tons per month, averaged over a rolling, 12-month period for K007}$

If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emissions Limitation:

Emissions of NO_x shall not exceed 0.37 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.

Emissions of NO_x shall not exceed 0.73 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.

Applicable Compliance Method:

Compliance with the NO_x emissions limitations is inherent based upon the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 3/98) emissions factor of 100 lb/MMscf.

$(100 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.37 \text{ tons per month, averaged over a rolling, 12-month period for K008}$

$[(100 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.73 \text{ tons per month, averaged over a rolling, 12-month period for K007}$



If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

h. Emissions Limitation:

Emissions of VOC from curing ovens/thermal incinerator shall not exceed 0.02 tons per month, averaged over a 12-month, rolling period for emissions unit **K008**.

Emissions of VOC from curing ovens/thermal incinerator shall not exceed 0.04 tons per month, averaged over a 12-month, rolling period for emissions unit **K007**.

Applicable Compliance Method:

Compliance with the VOC emissions limitations is inherent based upon the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 3/98) emissions factor of 5.5 lb/MMscf.

$(5.5 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton}) = 0.02 \text{ tons per month, averaged over a rolling, 12-month period for } \mathbf{K008}$

$[(5.5 \text{ lb/MMscf}) \times (0.001 \text{ MMscf/MMBtu}) \times (10 \text{ MMBtu/hr}) \times (730 \text{ hr/mo}) / (2000 \text{ lb/ton})] \times 2 \text{ ovens} = 0.04 \text{ tons per month, averaged over a rolling, 12-month period for } \mathbf{K007}$

If required, compliance with the emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

i. Emissions Limitation:

VOC emissions from coatings and clean-up materials applied in emissions unit **K007** and **K008**, combined, shall not exceed 43.68 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emissions limitation shall be demonstrated through the monitoring and recordkeeping requirements in d)(9) above.

g) Miscellaneous Requirements

(1) None.