Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

Certified Mail

6/17/2010

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
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)

Marshall Searles
Forest City Technologies, Plant 8
P.O. Box 86
Wellington, OH 44090

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0247171014
Permit Number: P0085545
Permit Type: OAC Chapter 3745-31 Modification
County: Lorain

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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 Kevin Boyce," 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NEDO

50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

614 | 644 3020
614 | 644 3184 (fax)
www.epa.ohio.gov

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Forest City Technologies, Plant 8

Facility ID: 0247171014
Permit Number: P0085545
Permit Type: OAC Chapter 3745-31 Modification
Issued: 6/17/2010
Effective: 6/17/2010
Expiration: 6/17/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
Forest City Technologies, Plant 8

Table of Contents

Authorization

Facility ID: 0247171014
Application Number(s): A0016215
Permit Number: P0085545
Permit Description: FEPTIO for coating lines
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $0.00
Issue Date: 6/17/2010
Effective Date: 6/17/2010
Expiration Date: 6/17/2015
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Forest City Technologies, Plant 8
22069 Fairgrounds Rd.
Wellington, OH 44090

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0085545
Permit Description: FEPTIO for coating lines

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

Emissions Unit ID: **K001**
Company Equipment ID: Dial Coater 1
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K003**
Company Equipment ID: Dial Coater 3
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K004**
Company Equipment ID: Dial Coater 4
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K005**
Company Equipment ID: Dial Coater 5
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K006**
Company Equipment ID: Dial Coater 6
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K007**
Company Equipment ID: Dial Coater 7
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K008**
Company Equipment ID: Dial Coater 8
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K009**
Company Equipment ID: Dial Coater 9
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K010**
Company Equipment ID: Dial Coater 10
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K011**
Company Equipment ID: Dial Coater 11
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: **K012**
Company Equipment ID: Dial Coater 12

Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**K013**
Company Equipment ID:	Dial Coater 13
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 Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed

permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.
If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.
You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] 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

[1] 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).

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.

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) None.

C. Emissions Unit Terms and Conditions

1. K001, Dial Coater 1

Operations, Property and/or Equipment Description:

Dial coater no. 1 with natural gas oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K001) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K001) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K001):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K001, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K001, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K001) and emissions units K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K001). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K001) and emissions units K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

2. K003, Dial Coater 3

Operations, Property and/or Equipment Description:

Dial coater no. 3 with natural gas oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K003) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K003) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K003):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K003, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K003, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K003) and emissions units K001, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K003). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K003) and emissions units K001, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

3. K004, Dial Coater 4

Operations, Property and/or Equipment Description:

Dial coater no. 4 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K004) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K004) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K004):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K004, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K004, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K004) and emissions units K001, K003, K005, K006, K007, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K004). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K004) and emissions units K001, K003, K005, K006, K007, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

4. K005, Dial Coater 5

Operations, Property and/or Equipment Description:

Dial coater no. 5 with natural gas oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K005) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K005) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K005):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K005, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K005, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K005) and emissions units K001, K003, K004, K006, K007, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K005). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K005) and emissions units K001, K003, K004, K006, K007, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

5. K006, Dial Coater 6

Operations, Property and/or Equipment Description:

Dial coater no. 6 with natural gas oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K006) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K006) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall collect and record the following information for each day for this emissions unit (K006):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K006, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K006, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K006) and emissions units K001, K003, K004, K005, K007, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K006). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K006) and emissions units K001, K003, K004, K005, K007, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

6. K007, Dial Coater 7

Operations, Property and/or Equipment Description:

Dial coater no. 7 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K007) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K007) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K007):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K007, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K007, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K007) and emissions units K001, K003, K004, K005, K006, K008, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K007). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K007) and emissions units K001, K003, K004, K005, K006, K008, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

7. K008, Dial Coater 8

Operations, Property and/or Equipment Description:

Dial coater no. 8 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K008) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K008) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K008):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K008, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K008, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K008) and emissions units K001, K003, K004, K005, K006, K007, K009, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K008). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K008) and emissions units K001, K003, K004, K005, K006, K007, K009, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

8. K009, Dial Coater 9

Operations, Property and/or Equipment Description:

Dial coater no. 9 with natural gas oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K009) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K009) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K009):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K009, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K009) and emissions units K001, K003, K004, K005, K006, K007, K008, K010, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K009). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K009) and emissions units K001, K003, K004, K005, K006, K007, K008, K010, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

9. K010, Dial Coater 10

Operations, Property and/or Equipment Description:

Linear coater no. 1 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K010) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K010) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K010):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K010, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K010, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K010) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K011, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K010). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K010) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K011, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

10. K011, Dial Coater 11

Operations, Property and/or Equipment Description:

Linear coater no. 2 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K011) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K011) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K011):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K011, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K011, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K011) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K012, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K011). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K011) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K012, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

11. K012, Dial Coater 12

Operations, Property and/or Equipment Description:

Linear coater no. 3 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
e.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
g.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K012) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K012) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K012):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K012, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K012, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K012) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, and K013; combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K012). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K012) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, and K013 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.

12. K013, Dial Coater 13

Operations, Property and/or Equipment Description:

Linear coater no. 4 with electric oven equipped with a catalytic oxidizer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-21335	VOC emissions shall not exceed 3.0 pounds per hour. VOC emissions shall not exceed 29.8 tons per year. See b)(2)a. below. 90 percent overall reduction of VOCs by weight for all solvent based coatings. See b)(2)e. below. See b)(2)d. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(B)(6). The VOC content of each coating that is not vented to the catalytic oxidizer (non-solvent based coatings) shall not exceed 3.0 pounds VOC per gallon, excluding

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		water and exempt solvents. See b)(2)f. below.
b.	OAC rule 3745-21-09(B)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-09(U)	In lieu of complying with the requirements of this rule when employing solvent based coatings, the permittee has opted to comply with the requirements of OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-21-09(U)(1)(i)	The VOC content limitation specified by this rule is equivalent to the VOC content limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-09(B)(3)(l)	See d)(2)a., d)(2)b., and d)(2)c. below.
f.	OAC rule 3745-21-09(B)(3)(m)	See e)(2)a., e)(2)b., and e)(2)c. below.
g.	OAC rule 3745-21-09(B)(3)(n)	See d)(1), f)(1)c., and f)(2) below.
h.	OAC rule 3745-31-05(D)	Use of non-solvent based coatings is limited to a maximum of 19,800 gallons per year on a rolling 12 month basis. See b)(2)b., b)(2)c., and b)(2)g. below.

(2) Additional Terms and Conditions

a. The emissions of VOCs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

b. The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

c. The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

d. Based upon the permittee's application, there are no cleanup materials associated with this emissions unit.

e. A solvent based coating is any coating with a volatile organic compound content of equal to or greater than 3.0 pounds per gallon. All emissions from solvent based coatings must be vented to the catalytic oxidizer.

f. A non-solvent based coating is any coating that has a VOC content of less than 3.0 pounds VOC per gallon, excluding water and exempt solvents.

g. Usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

c) Operational Restrictions

(1) Exhaust gases from operation of the emissions unit shall be vented to the catalytic oxidizer when employing solvent based coatings.

(2) The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The VOC conversion efficiency of the catalyst in the catalytic oxidizer, as determined by the catalyst activity testing shall be at least 90% at a test temperature that is representative of the normal temperature at the catalyst bed inlet. Solvent loading during catalyst analysis shall be consistent with the test laboratory's normal testing protocol.

(4) All ventilation fans associated with this emissions unit and the catalytic oxidizer shall be in operation at all times when this emissions unit is in operation and employing solvent based coatings.

(5) When employing the catalytic oxidizer, all bypass dampers, actuator pins, and associated motors shall be in the correct position and in good operating condition at all times when this emissions unit is in operation and employing solvent based coatings to ensure that all captured VOC emissions are vented to the catalytic oxidizer. Also, all the hooding and ductwork comprising the VOC emission capture system for this emissions unit shall be free of leaks and holes that would permit the escape of the captured VOC emissions.

(6) The average, total exhaust flow rate from this emissions unit to the catalytic oxidizer shall be within 25% of the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(7) The usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed 19,800 gallons on a rolling, 12-month average.

During the first twelve (12) months of operation under this permit, usage of non-solvent based coatings in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 when not venting to the catalytic oxidizer shall not exceed the cumulative total hours of operation as specified for each month in the following table:

Month	Cumulative Allowable Non-Solvent Based Coating Usage*
1	1650
2	3300
3	4950
4	6600
5	8250
6	9900
7	11,550
8	13,200
9	14,850
10	16,500
11	18,150
12	19,800

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual cumulative non-solvent based coating usage* shall be based upon a rolling, 12-month summation of the monthly non-solvent based coating usage.

*Designates non-solvent based coating usage when not venting to the catalytic oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain continuous monitors and recorder(s) which measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the

exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance. The permittee may use the oxidizer's temperature chart to determine the temperature differential across the catalyst bed.

c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings. The permittee may use the current temperature chart as the log documenting that the monitoring equipment and control device are operating. Each bypass of the collection system and/or control device shall be logged as to the date and time.

(3) The permittee shall perform an inspection of the catalytic oxidizer, including the catalyst bed, at least once each calendar year. Each inspection shall consist of internal and visual inspections in accordance with the manufacturer's recommendations and shall include a physical inspection of the unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. Repair and replacement of equipment shall be performed as determined by the inspection. In accordance with the testing schedule in Section f), a sample of catalyst material shall be collected from the catalyst bed to perform the catalyst activity tests required in Section f).

(4) The permittee shall maintain a record of the results of each annual inspection of the catalytic oxidizer, as well as the results of each catalyst activity test required in Section f). These records shall be maintained at the facility for a period of five (5) years.

(5) The permittee shall operate and maintain a flow meter at the inlet to the catalytic oxidizer to ensure that the exhaust from the coating room and the emissions units in the coating room are being directed to the catalytic oxidizer when employing solvent based coatings. The permittee shall collect and record the flow rate at the inlet to the catalytic oxidizer on a daily basis.

(6) Each calendar month, the permittee shall inspect the operational condition and integrity of each ventilation fan comprising the capture system. Ventilation fan observations shall include visual inspections of the fan wheel, belts, and bearings. Lubrication of bearings and replacement of parts shall occur as necessary. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(7) Each calendar month, the permittee shall inspect the operational condition and integrity of all hooding, ductwork, and bypass dampers comprising the capture system. Hooding and ductwork observations shall include visual inspections to verify that the damper setting is in the correct position (i.e., to oxidizer or to atmosphere) and visual inspections of the actuator and motor to verify that the actuator pin and the motor are operating

properly. The permittee shall document the results of all monthly inspections, including any corrective actions taken.

(8) The permittee shall collect and record the following information for each day for this emissions unit (K013) for all coatings employed in this emissions unit that are not vented to the catalytic oxidizer:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all non-solvent based coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings}.

(9) The permittee shall collect and record the following information for each day for this emissions unit (K013) for all solvent based coatings employed in this emissions unit:

a. The name and identification number of each coating, as applied;

b. The volume in gallons of each coating, as applied;

c. The VOC content of each coating, as applied, in pounds per gallon;

d. The hours of operation; and

e. The total VOC emissions from all coatings employed, in pound(s) per hour {summation of [(b x c)/d] for all coatings multiplied by the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established}.

(10) The permittee shall record the following information for each day for this emissions unit (K013):

a. The total VOC emissions from all coatings {summation of d)(8)e. and d)(9)e., in pounds per hour}.

(11) The permittee shall collect and record the following information each month:

a. For all coating lines at the facility, including all de minimis and exempt coating lines:

i. The name and identification number of each coating, as applied;

ii. The volume in gallons of each coating, as applied;

iii. The individual HAP content for each HAP in each coating, as applied, in pounds per gallon; and

iv. The total HAP emissions for all coating lines of each single HAP [summation of (ii x iii) for all coatings; for coating lines with control equipment (ii x iii) shall be multiplied by the overall control efficiency determined during the most recent emission test that demonstrated that the source was in compliance or (1 – 0.90) until such time the overall control efficiency is established and added to the total sum of HAP emissions].

b. For all combustion sources of HAPs at the facility:

i. The total volume of natural gas burned.

ii. The total HAP emissions calculated using emission factors from AP-42, Section 1.4, 7/98 or any later edition. It is also acceptable for the permittee to establish emission factors for each combustion source through emission testing witnessed by the Ohio EPA Northeast District Office and use those emission factors to calculate HAP emissions; and

iii. The total combined HAP emissions for all emissions units of each single HAP and total combined HAPs by summation of d)(11)a.iv for all HAPs emitted by the coating lines and d)(11)b.ii for all HAP emissions from combustion sources.

(12) The federally enforceable permit-to-install and operate (FEPTIO) for this emissions unit, K013, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each of the toxic air contaminants 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 results 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 of the toxic compounds emitted from the emissions unit, (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, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 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 contaminants:

Toxic Contaminant: toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 2.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.13

MAGLC (ug/m3): 4476

The permittee has demonstrated that emissions of toluene, from emissions unit K013, are calculated to be less than eighty percent 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).

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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 changes 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 or its 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.

(14) 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.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and was not vented to the catalytic oxidizer. The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

(2) The permittee shall submit quarterly summaries of the following records:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit when employing solvent based coatings;

b. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature of the exhaust gases immediately before the catalyst bed (as determined by the continuous temperature monitor) did not comply with the temperature limitation specified above; and

c. All 3-hour blocks of time (when the emissions unit was in operation and employing solvent based coatings) during which the average temperature difference across the catalyst bed (as determined by the continuous temperature monitor) was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

NOTE: Information submitted pursuant to Section e)(2)c. is not relevant for determining compliance with any operation restriction contained in Section c). As long as the permittee performs the monitoring, record keeping, and reporting specified in Section d)(2)b. and e)(2)c. of these terms and conditions, an average temperature difference across the catalyst bed of less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance shall not constitute a violation of any operational restriction or be considered a deviation.

(3) The permittee shall submit deviation (excursion) reports that identify all periods of time when the emissions unit was in operation employing solvent based coatings and the daily average air flow rate in the inlet stack to the catalytic oxidizer was more than 25% less than the mean average stack gas velocity during the most recent compliance test that demonstrated the emissions unit was in compliance with the applicable capture efficiency limitation.

(4) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of any single HAP from all emissions units at the facility exceeded 9.9 tons per year, and the actual rolling, 12-month emissions of each such single HAP for each such month.

(5) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month emissions of combined HAPs from all emissions units at the facility exceeded 24.9 tons per year, and the actual rolling, 12-month emissions of combined HAPs for each such month.

(6) The permittee shall submit annual reports which specify the actual annual VOC emissions for this emissions unit (K013) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, and K012, combined. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(7) The permittee shall submit annual reports which summarize the facility-wide emissions of each single HAP and combined HAPs from all emissions units at the facility. The

reports shall include emission calculations, be submitted by January 31 of each year, and cover the previous calendar year.

(8) The permittee shall submit annual reports which summarize the results of the annual inspections conducted on the catalytic oxidizer by the manufacturer's representative. The reports shall describe any maintenance conducted on the catalytic oxidizer as a direct result of the inspections by the manufacturer's representative. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

(9) The permittee shall submit reports that include the results of the catalyst activity tests required in Section f). These reports shall be submitted within 45 days after each catalyst activity test is performed.

(10) The permittee shall submit deviation (excursion) reports which identify each day where the hourly VOC emission rate exceeded 3.0 pounds per hour for this emission unit (K013). The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days after the exceedance occurs.

(11) The permittee shall submit deviation (excursion) reports which identify each month during which the rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer in emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013 exceeded 19,800 gallons, and the actual rolling, 12-month usage of non-solvent based coatings not vented to the catalytic oxidizer for each such month.

(12) 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.

(13) 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) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

VOC emissions shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section d)(10) of these terms and conditions.

b. Emission Limitation:

The emissions of volatile organic compounds (VOCs) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 29.8 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

c. Emission Limitation:

90 percent overall reduction of VOCs by weight.

Applicable Compliance Method:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204. Performance testing shall be in accordance with OAC rule 3745-21-10(C).

d. Emission Limitation:

The emissions of each single hazardous air pollutant (HAP) from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

e. Emission Limitation:

The emissions of the combined HAPs from emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, and K013, and all other emission sources at the facility, including but not limited to de minimis, exempt, and combustion sources, shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections d)(8) and d)(9) of these terms and conditions.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit (K013) and emissions units K001, K003, K004, K005, K006, K007, K008, K009, K010, K011, and K012 in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitation of 90 percent overall reduction of VOCs by weight.

c. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

i. Method 25 of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm or Method 25A of 40 CFR Part 60, Appendix A, if the VOC concentrations as carbon in the outlet are less than 50 ppm; and

ii. Method 204 of 40 CFR Part 51, Appendix M.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. Testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

(3) The capture efficiency shall be determined using Method 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 "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement).

The control or destruction efficiency defined as the percent reduction of 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. The test methods and procedures selected shall be based upon 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.

(4) 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 Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 emission unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or person(s) responsible for the test(s) and submitted to the Ohio EPA Northeast 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 Northeast District Office.

(5) US EPA Method 24 shall be used to determine the VOC contents of all the materials employed in this emissions unit.

g) Miscellaneous Requirements

(1) None.