

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

1/22/2014

Certified Mail

Mr. Thomas Alcaro
EXAL CORP
ONE PERFORMANCE PL
YOUNGSTOWN, OH 44502

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0250110920
Permit Number: P0115949
Permit Type: Renewal
County: Mahoning

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

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.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
EXAL CORP**

Facility ID:	0250110920
Permit Number:	P0115949
Permit Type:	Renewal
Issued:	1/22/2014
Effective:	1/22/2014
Expiration:	1/25/2016



**Division of Air Pollution Control
Permit-to-Install and Operate**

for
EXAL CORP

Table of Contents

Authorization	1
A. Standard Terms and Conditions	4
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	5
2. Who is responsible for complying with this permit?	5
3. What records must I keep under this permit?	5
4. What are my permit fees and when do I pay them?.....	5
5. When does my PTIO expire, and when do I need to submit my renewal application?	5
6. What happens to this permit if my project is delayed or I do not install or modify my source?	6
7. What reports must I submit under this permit?	6
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?	6
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	6
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	7
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	7
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	7
13. Can I transfer this permit to a new owner or operator?.....	8
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	8
15. What happens if a portion of this permit is determined to be invalid?	8
B. Facility-Wide Terms and Conditions.....	9
C. Emissions Unit Terms and Conditions	13
1. Emissions Unit Group -Group 1: K003, K004	14
2. Emissions Unit Group -Group 2: K001, K002, K005, K006, K007, K008, K009, K010, K011, K012, K013, K014	24
3. Emissions Unit Group -Group 3: K015, K016	36



Authorization

Facility ID: 0250110920
Application Number(s): A0047780
Permit Number: P0115949
Permit Description: Renewal FEPTIO with minor administrative updates to incorporate current reporting requirements.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 1/22/2014
Effective Date: 1/22/2014
Expiration Date: 1/25/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

EXAL CORP
One Performance Place
Youngstown, OH 44502

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

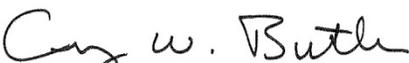
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(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


Craig W. Butler
Interim Director



Authorization (continued)

Permit Number: P0115949

Permit Description: Renewal FEPTIO with minor administrative updates to incorporate current reporting requirements.

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

Group Name: Group 1

Emissions Unit ID:	K003
Company Equipment ID:	Can Line #3
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K004
Company Equipment ID:	Can Line #4
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable

Group Name: Group 2

Emissions Unit ID:	K001
Company Equipment ID:	Can Line #1
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	Can Line #2
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K005
Company Equipment ID:	Can Line #5
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K006
Company Equipment ID:	Can Line #6
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K007
Company Equipment ID:	CtoC Line
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K008
Company Equipment ID:	Can Line #7
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K009
Company Equipment ID:	Can Line #8
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable



Emissions Unit ID:	K010
Company Equipment ID:	Can Line #9
Superseded Permit Number:	02-20788
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K011
Company Equipment ID:	Can Line #10
Superseded Permit Number:	02-21429
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K012
Company Equipment ID:	Can Line #11
Superseded Permit Number:	02-21429
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K013
Company Equipment ID:	Can Line #12
Superseded Permit Number:	02-21429
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K014
Company Equipment ID:	Can Line #13
Superseded Permit Number:	02-22662
General Permit Category andType:	Not Applicable

Group Name: Group 3

Emissions Unit ID:	K015
Company Equipment ID:	Can Line #14
Superseded Permit Number:	P0107087
General Permit Category andType:	Not Applicable
Emissions Unit ID:	K016
Company Equipment ID:	Can Line #15
Superseded Permit Number:	P0110001
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate

EXAL CORP

Permit Number: P0115949

Facility ID: 0250110920

Effective Date: 1/22/2014

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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



Final Permit-to-Install and Operate

EXAL CORP

Permit Number: P0115949

Facility ID: 0250110920

Effective Date: 1/22/2014

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) B.2.
2. Facility-Wide Emission Limitations:
 - a) Pursuant to OAC rule 3745-31-05(D), the combined emissions, based upon a rolling, 12-month summation, from emissions units K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K012, K013, K014, K015, and K016 shall not exceed:
 - (1) 97 tons/year of volatile organic compounds (VOC);
 - (2) 9.9 tons/year of each individual hazardous air pollutant (HAP); and
 - (3) 24.9 tons/year of total combined HAPs.
 - b) The permittee shall maintain monthly records of the following information for all emissions units at the facility:
 - (1) the total uncontrolled VOC emissions during the rolling, 12-month period, i.e., the summation of the VOC emissions for the present month plus the previous 11 months of operation, for each emissions unit, in tons; and
 - (2) the total controlled VOC emissions during the rolling, 12-month period, i.e., the summation of the VOC emissions for the present month plus the previous 11 months of operation, for each emissions unit, in tons.

Monthly emissions shall be calculated in accordance with Section C of this permit.
 - c) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutant (HAP)¹ that are applied at the facility:
 - (1) the name and identification number/code of each coating, thinner, additive, cleanup material, and any other material containing any HAP;
 - (2) the name/identification of each individual HAP contained in each material applied (and identified in c)(1) above) and the pound(s) of each HAP per gallon of each HAP-containing material applied;



- (3) the number of gallons of each coating, thinner, additive, cleanup material, and other material applied during the month;
- (4) for each individual HAP, the total uncontrolled emissions from all the materials employed, in ton(s), i.e., for each individual HAP, the summation of the products of c)(2) times c)(3) for all the materials applied during the month, divided by 2,000 pounds;
- (5) the uncontrolled total combined HAPs emissions from all the materials employed during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from c)(4) above;
- (6) for each individual HAP, the calculated, controlled emission rate from all the materials employed, in ton(s), i.e., the total uncontrolled individual HAP emission rate calculated in c)(4) above, multiplied by 1 minus the overall control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions unit was in compliance;
- (7) the calculated, controlled total combined HAPs emission rate for all the materials employed, in ton(s), i.e., the uncontrolled total combined HAPs emission rate, calculated in c)(5) above, multiplied by 1 minus the overall control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions unit was in compliance;
- (8) for each individual HAP, the total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in c)(6) above, for the present month plus the previous 11 months of operation, in ton(s); and
- (9) the total combined HAP emissions during the rolling, 12-month period, i.e., the summation of all HAP emissions, as recorded in c)(7) above, for the present month plus the previous 11 months of operation, in ton(s).

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

- d) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the rolling, 12-month VOC, single HAP or combined HAP emission limitations for this facility.

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

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

- e) Testing Requirements

- (1) Emission Limitation:
Facility-wide VOC emissions from all coatings and cleanup materials shall not exceed 97.0 tons per rolling, 12-month period.



Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping and reporting requirements specified in sections b) and d) above.

(2) Emission Limitation:

Facility-wide emissions from all coatings and cleanup materials shall not exceed:

9.9 tons per rolling, 12-month period from any individual HAP; and
24.9 tons per rolling, 12-month period from all combined HAPs

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping and reporting requirements specified in sections c) and d) above.

f) **Miscellaneous Requirements**

- (1) Prior to coating beverage cans (as defined in 40 CFR Part 60, Subpart WW), the permittee shall apply for and obtain an Ohio EPA permit to install and operate.

40 CFR Part 60, Subpart WW (60.491) defines "beverage cans" as:

"any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged. The definition does not include containers in which fruit or vegetable juices are packaged.



Final Permit-to-Install and Operate

EXAL CORP

Permit Number: P0115949

Facility ID: 0250110920

Effective Date: 1/22/2014

C. Emissions Unit Terms and Conditions



1. Emissions Unit Group -Group 1: K003, K004

EU ID	Operations, Property and/or Equipment Description
K003	Line 3: One piece aluminum can extrusion and coating vented to thermal oxidizer
K004	Line 4: One piece aluminum can extrusion and coating vented to thermal 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. d)(6)-(9) and e)(5).

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

a. b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(A)(3)	VOC emissions from all coatings and clean-up materials shall not exceed: K003: 5.60 lbs/hr and 24.50 tons/year K004: 2.87 lbs/hr and 12.57 tons/year The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). See b)(2)a-d.
b	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V, MACT and PSD.	See Facility-Wide Terms and Conditions Section B.2
c	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(D)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
d	ORC 3704.03(F)(4)	See d)(6)-(9) and e)(5).



(2) Additional Terms and Conditions

- a. The hourly VOC emissions limit was established to reflect the potential to emit (PTE) for these emissions units using the maximum coating usage (gal/1000 cans), maximum production rate (cans/minute) and an 85% overall control efficiency. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with the hourly emission limitation.
- b. All of the VOC emissions from these emissions units shall be vented to a thermal oxidizer that shall meet the operational, monitoring and record keeping requirements of this permit, when the emissions units are in operation.
- c. The capture and control system shall provide not less than an 85% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 90%, by weight.
- d. Overspray from the interior body spray booths shall be captured by a fabric filter.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.
- (2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm 1\%$ of the temperature being measured or $\pm 5^\circ\text{F}$, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
 - a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and



- b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years

- (3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

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

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

- (4) The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not



constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (5) The permittee shall collect and record the following information each month for each emissions unit:
- a. the name and identification number of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, as applied, in lbs/gal;
 - c. the amount of each coating and cleanup material (fresh clean up material minus the amount of cleanup recovered for disposal) employed, in gallons;
 - d. for each coating and cleanup material, the uncontrolled VOC emitted, [b x c x (1 ton/2000 lbs)], in tons/month;
 - e. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, [summation of monthly emissions in "d"], in tons/month;
 - f. the total controlled VOC emissions from all coatings and cleanup material employed, calculated by multiplying the uncontrolled VOC emissions by 1 minus the overall control efficiency of the catalytic oxidizer [as determined by the most recent emission test that demonstrated that the emissions unit was in compliance], in tons/month; and
 - g. the total annual controlled VOC emissions from all coatings and clean-up materials, [summation of monthly VOC emissions in "f"], in tons/year.
- (6) The FEPTIO application for these emissions unit(s), K001- K016, 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 these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):



- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
- ii. STEL (short term exposure limit) or the ceiling value from the ACGIH TLVs for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

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

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

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

Toxic Contaminant: Xylene

TLV (mg/m³): 434.19

Maximum Hourly Emission Rate (lbs/hr): 6.11

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 424.4

MAGLC (ug/m³): 10337.91

The permittee has demonstrated that emissions of Xylene from emissions unit(s) K001-K016 are calculated to be less than 80% of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and



- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(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.
- (9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio



EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average combustion temperature within the thermal oxidizer was more than 50°F below the average temperature maintained during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
 - b. any records of downtime (date and length of time) for the capture (collection) system, the thermal oxidizer, and/or the monitoring equipment when the emissions unit(s) was/were in operation; and
 - c. a log of the operating time for the capture system, thermal oxidizer, monitoring equipment, and the emissions unit(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (3) 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 PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify in the annual PER the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for these emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;



- c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (5) 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 groundlevel concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
VOC emissions from all coatings and clean-up materials shall not exceed:

K003: 5.60 lbs/hr and 24.50 tons/year
K004: 2.87 lbs/hr and 12.57 tons/year

Applicable Compliance Method:
Compliance with the hourly emission limitations shall be demonstrated in accordance with the emission testing procedures specified in f)(3).

Compliance with the annual limitations shall be demonstrated based upon the record keeping requirements specified in d)(5).
 - b. Emission Limitation:
The capture and control system shall provide not less than an 85% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 90%, by weight.

Applicable Compliance Method:
Compliance shall be demonstrated in accordance with the emission testing procedures specified in f)(3).
- (2) Formulation data or US EPA Method 24 or 24A shall be used to determine the VOC content of the coatings and clean up materials.



- (3) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:
- a. The emission testing shall be conducted every 5.0 years after the last test that demonstrated compliance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, the overall removal efficiency, and the control efficiency limitations for VOC.
 - c. Methods 1 through 4, and Method 25 or 25A of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rate for VOC.

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

- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
- g. 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).
- h. 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 emissions unit and the



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

- i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA 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.

g) Miscellaneous Requirements

- (1) None.



2. Emissions Unit Group -Group 2: K001, K002, K005, K006, K007, K008, K009, K010, K011, K012, K013, K014

EU ID Operations, Property and/or Equipment Description

K001	Line 1: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K002	Line 2: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K005	Line 5: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K006	Line 6: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K007	CtoC Line: One piece aluminum can manufacture and coating vented to a catalytic oxidizer
K008	Line 7: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K009	Line 8: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K010	Line 9: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K011	Line 10: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K012	Line 11: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K013	Line 12: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K014	Line 13: One piece aluminum can extrusion and coating vented to 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. d)(6)-(9) and e)(5).

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

a. b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(A)(3)	VOC emissions from all coatings and clean-up materials shall not exceed: K001: 3.14 lbs/hr and 13.75 tons/year K002: 3.14 lbs/hr and 13.75 tons/year K005: 2.40 lbs/hr and 10.50 tons/year



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		K006: 3.41 lbs/hr and 14.95 tons/year K007: 11.46 lbs/hr and 50.18 tons/year K008: 3.65 lbs/hr and 10.00 tons/year K009: 3.13 lbs/hr and 13.72 tons/year K010: 3.13 lbs/hr and 13.72 tons/year K011: 4.34 lbs/hr and 19.02 tons/year K012: 4.34 lbs/hr and 19.02 tons/year K013: 4.34 lbs/hr and 19.02 tons/year K014: 4.39 lbs/hr and 19.22 tons/year The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). See b)(2)a-d.
b	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V, MACT and PSD.	See Facility-Wide Terms and Conditions Section B.2
c	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09 (D)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
d	ORC 3704.03(F)(4)	See d)(6)-(9) and e)(5).

(2) Additional Terms and Conditions

- a. The hourly VOC emissions limit was established to reflect the potential to emit (PTE) for these emissions units using the maximum coating usage (gal/1000 cans), maximum production rate (cans/minute) and an 85% overall control efficiency. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with the hourly emission limitation.
- b. All of the VOC emissions from these emissions units shall be vented to a catalytic oxidizer that shall meet the operational, monitoring and record keeping requirements of this permit, when the emissions units are in operation.
- c. The capture and control system shall provide not less than an 85% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 90%, by weight.
- d. Overspray from the interior body spray booths shall be captured by a fabric filter.

c) Operational Restrictions

- (1) The catalytic oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The conversion efficiency of the catalyst, as determined in an annual catalyst activity test, shall be sufficient to meet the control device removal efficiency requirements of this permit at a



test temperature that is equal to that temperature at which the inlet to the catalyst bed is set. Solvent loading during the catalyst activity test shall be consistent with the test laboratory's normal testing protocol.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit(s) controlled by the catalytic oxidizer is/are in operation, shall not be more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance. The acceptable average temperature difference across the catalyst bed, for any 3-hour block of time (when the emissions unit(s) is/are in operation), shall not be less than 80% of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.
- (2) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the oxidizer's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm 1\%$ of the temperature being measured or $\pm 5^\circ\text{F}$, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
 - a. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic oxidizer was/were in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
 - b. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic oxidizer was/were in operation, during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
 - c. a log or record of the operating time for the capture (collection) system, catalytic oxidizer, monitoring equipment, and the associated emissions unit(s).

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than 3 years.

- (3) The permittee shall perform a preventative maintenance inspection of the catalytic oxidizer on an annual basis to evaluate the performance of the catalyst bed. 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 all of the associated equipment, including but not limited to burners, controls, dampers, valves and monitoring and recording equipment. Repair and replacement of equipment and the catalyst shall be performed as determined by the inspection. During each annual inspection a sample of the catalyst material shall be collected from the catalyst bed and used to perform a catalyst activity test. The permittee shall maintain a record of the results of each annual inspection and the results of each annual catalyst activity test. The permittee is exempt from the requirement to test the catalyst material each calendar year when emission testing for this control device is conducted with passing results. However, annual inspections are required each year.

The permittee shall also perform weekly inspections of the external integrity of the catalytic oxidizer. Records shall be maintained of the inspections and the date(s) of catalyst replacement, and if only partial, the amount or percent of the total catalyst replaced.

- (4) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

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

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;



- j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The temperature ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted temperature range(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the temperature range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (5) The permittee shall collect and record the following information each month for each emissions unit:
 - a. the name and identification number of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, as applied, in lbs/gal;
 - c. the amount each coating and cleanup material (fresh clean up material minus the amount of cleanup recovered for disposal) employed, in gallons;
 - d. for each coating and cleanup material, the uncontrolled VOC emitted, [b x c x (1 ton/2000 lbs)], in tons/month;
 - e. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, [summation of monthly emissions in "d"], in tons/month;
 - f. the total controlled VOC emissions from all coatings and cleanup material employed, calculated by multiplying the uncontrolled VOC emissions by 1 minus the overall control efficiency of the catalytic oxidizer [as determined by the most recent emission test that demonstrated that the emissions unit was in compliance], in tons/month; and
 - g. the total annual controlled VOC emissions from all coatings and clean-up materials, [summation of monthly VOC emissions in "f"], in tons/year.
- (6) The FEPTIO application for these emissions unit(s), K001- K016, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was



performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
 - ii. STEL (short term exposure limit) or the ceiling value from the ACGIH TLVs for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., X hours/day and Y days/week, from that of 8 hours/day and 5 days/week. The resulting calculation was (and shall be) used to determine the 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 contaminant(s):

Toxic Contaminant: Xylene

TLV (mg/m³): 434.19

Maximum Hourly Emission Rate (lbs/hr): 6.11

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 424.4

MAGLC (ug/m³): 10337.91

The permittee has demonstrated that emissions of Xylene from emissions unit(s) K001-K016 are calculated to be less than 80% of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).



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

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(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.
- (9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
 - (2) The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50°F below the average temperature established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
 - c. any records of downtime (date and length of time) for the capture (collection) system, the catalytic incinerator, and/or the monitoring equipment when the emissions unit(s) was/were in operation; and
 - d. a log of the operating time for the capture system, catalytic incinerator, monitoring equipment, and the emissions unit(s).



These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (3) 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 PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify in the annual PER the following information concerning the operations of the catalytic oxidizer during the 12-month reporting period for this emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed was outside of the acceptable ranges;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the catalytic oxidizer;
 - c. each incident of deviation described in 'a' or "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in 'a' or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed into compliance with the acceptable range(s), was determined to be necessary and was not taken;
 - e. each incident of deviation described in 'a' or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and
 - f. the results of any catalyst activity test(s) along with a summary of the results of the annual inspection of the internal integrity of the catalytic oxidizer.
- (5) 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 groundlevel concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions from all coatings and clean-up materials shall not exceed:

- K001: 3.14 lbs/hr and 13.75 tons/year
- K002: 3.14 lbs/hr and 13.75 tons/year
- K005: 2.40 lbs/hr and 10.50 tons/year
- K006: 3.41 lbs/hr and 14.95 tons/year
- K007: 11.46 lbs/hr and 50.18 tons/year
- K008: 3.65 lbs/hr and 10.00 tons/year
- K009: 3.13 lbs/hr and 13.72 tons/year
- K010: 3.13 lbs/hr and 13.72 tons/year
- K011: 4.34 lbs/hr and 19.02 tons/year
- K012: 4.34 lbs/hr and 19.02 tons/year
- K013: 4.34 lbs/hr and 19.02 tons/year
- K014: 4.39 lbs/hr and 19.22 tons/year

Applicable Compliance Method:

Compliance with the hourly emission limitations shall be demonstrated in accordance with the emission testing procedures specified in f)(4).

Compliance with the annual limitations shall be demonstrated based upon the record keeping requirements specified in d)(5).

b. Emission Limitation:

The capture and control system shall provide not less than an 85% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 90%, by weight.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the emission testing procedures specified in f)(4).

(2) Formulation data or US EPA Method 24 or 24A shall be used to determine the VOC content of the coatings and clean up materials.

(3) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in this permit. An intent-to-test notification shall not be required for catalyst activity testing. The procedures for the catalyst activity test shall be conducted in accordance with the manufacturer's recommendations and as required by the appropriate test method.

(4) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:



- a. The emission testing shall be conducted every 5.0 years after the last test that demonstrated compliance.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, the overall removal efficiency, and the control efficiency limitations for VOC.
- c. Methods 1 through 4, and Method 25 or 25A of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rate for VOC.

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

- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" (ITT) notification to the Ohio EPA Northeast District Office. The ITT 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).
- h. 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 emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



- i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA 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.

g) Miscellaneous Requirements

- (1) None.



3. Emissions Unit Group -Group 3: K015, K016

EU ID	Operations, Property and/or Equipment Description
K015	Line 14: One piece aluminum can extrusion and coating vented to catalytic oxidizer
K016	Line 15: One piece aluminum can extrusion and coating vented to 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. d)(6)-(9) and e)(5).

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

a. b)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(A)(3)	VOC emissions from all coatings and clean-up materials shall not exceed: K015: 6.35 lbs/hr and 20.0 tons/year The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). See b)(2)a-d.
b	ORC 3704.03(T)	VOC emissions from all coatings and clean-up materials shall not exceed: K016: 6.35 lbs/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). See b)(2)a-d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c	OAC rule 3745-31-05(F)	VOC emissions from all coatings and clean-up materials shall not exceed: K016: 19.0 tons/year See b)(2)a-d.
d	OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(D)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
e	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V, MACT and PSD.	See Facility-Wide Terms and Conditions Section B.2
f	ORC 3704.03(F)(4)(c)	See d)(6)-(9) and e)(5).

(2) Additional Terms and Conditions

- a. The hourly VOC emissions limits were established to reflect the potential to emit (PTE) for these emissions units using the maximum coating usage (gal/1000 cans), maximum production rate (cans/minute) and a 90% overall control efficiency. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with the hourly emission limitations.
- b. All of the VOC emissions from these emissions units shall be vented to a catalytic oxidizer that shall meet the operational, monitoring and record keeping requirements of this permit, when the emissions units are in operation.
- c. The capture and control system shall provide not less than an 90% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 92%, by weight.
- d. Overspray from the interior body spray booths shall be captured by a fabric filter.

c) Operational Restrictions

- (1) The catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The conversion efficiency of the catalyst, as determined in an annual catalyst activity test, shall be sufficient to meet the control device removal efficiency requirements of this permit at a test temperature that is equal to that temperature at which the inlet to the catalyst bed is set. Solvent loading during the catalyst activity test shall be consistent with the test laboratory's normal testing protocol.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature of the exhaust gases immediately



before the catalyst bed, for any 3-hour block of time when the emissions unit(s) controlled by the catalytic incinerator is/are in operation, shall not be more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance. The acceptable average temperature difference across the catalyst bed, for any 3-hour block of time (when the emissions unit(s) is/are in operation), shall not be less than 80% of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

- (2) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm 1\%$ of the temperature being measured or $\pm 5^\circ\text{F}$, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic incinerator was/were in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50°F below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
 - b. all 3-hour blocks of time, when the emissions unit(s) controlled by the catalytic incinerator was/were in operation, during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
 - c. a log or record of the operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit(s).

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed. These records shall be maintained at the facility for a period of no less than 3 years.

- (3) The permittee shall perform a preventative maintenance inspection of the catalytic incinerator on an annual basis to evaluate the performance of the catalyst bed. 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 all of the associated equipment, including but not limited to burners, controls, dampers, valves and monitoring and recording equipment. Repair and replacement of equipment and the catalyst shall be performed as determined by the inspection. During each annual inspection a sample of the catalyst material shall be collected from the catalyst bed and used to perform a catalyst activity test. The permittee shall maintain a record of the results of each annual inspection and the results of each annual catalyst activity test. The



permittee is exempt from the requirement to test the catalyst material each calendar year when emission testing for this control device is conducted with passing results. However, annual inspections are required each year.

The permittee shall also perform weekly inspections of the external integrity of the catalytic incinerator. Records shall be maintained of the inspections and the date(s) of catalyst replacement, and if only partial, the amount or percent of the total catalyst replaced.

- (4) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

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

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

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



The temperature ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted temperature range(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the temperature range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (5) The permittee shall collect and record the following information each month for this emissions unit:
- a. the name and identification number of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material, as applied, in lbs/gal;
 - c. the amount each coating and cleanup material (fresh clean up material minus the amount of cleanup recovered for disposal) employed, in gallons;
 - d. for each coating and cleanup material, the uncontrolled VOC emitted, [b x c x (1 ton/2000 lbs)], in tons/month;
 - e. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, [summation of monthly emissions in "d"], in tons/month;
 - f. the total controlled VOC emissions from all coatings and cleanup material employed, calculated by multiplying the uncontrolled VOC emissions by 1 minus the overall control efficiency of the catalytic incinerator [as determined by the most recent emission test that demonstrated that the emissions unit was in compliance], in tons/month; and
 - g. the total annual controlled VOC emissions from all coatings and clean-up materials, [summation of monthly VOC emissions in "f"], in tons/year.
- (6) The FEPTIO application for these emissions unit(s), K001- K016, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic



compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
- ii. STEL (short term exposure limit) or the ceiling value from the ACGIH TLVs for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

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

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

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

Toxic Contaminant: Xylene

TLV (mg/m³): 434.19

Maximum Hourly Emission Rate (lbs/hr): 6.11

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 424.4

MAGLC (ug/m³): 10337.91

The permittee has demonstrated that emissions of Xylene from emissions unit(s) K001-K016 are calculated to be less than 80% of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled;



- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(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.
- (9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.



e) Reporting Requirements

(1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

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

- a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50°F below the average temperature established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
- b. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance;
- c. any records of downtime (date and length of time) for the capture (collection) system, the catalytic incinerator, and/or the monitoring equipment when the emissions unit(s) was/were in operation; and
- d. a log of the operating time for the capture system, catalytic incinerator, monitoring equipment, and the emissions unit(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

(3) 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 PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.



- (4) The permittee shall identify in the annual PER the following information concerning the operations of the catalytic incinerator during the 12-month reporting period for this emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed was outside of the acceptable ranges;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the catalytic incinerator;
 - c. each incident of deviation described in 'a' or "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in 'a' or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed into compliance with the acceptable range(s), was determined to be necessary and was not taken;
 - e. each incident of deviation described in 'a' or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and
 - f. the results of any catalyst activity test(s) along with a summary of the results of the annual inspection of the internal integrity of the catalytic incinerator.
- (5) 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 groundlevel 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
VOC emissions from all coatings and clean-up materials shall not exceed:

K015: 6.35 lbs/hr and 20.0 tons/year
K016: 6.35 lbs/hr and 19.0 tons/year



Applicable Compliance Method:

Compliance with the hourly emission limitations shall be demonstrated in accordance with the emission testing procedures specified in f)(4).

Compliance with the annual limitations shall be demonstrated based upon the record keeping requirements specified in d)(5).

b. Emission Limitation:

The capture and control system shall provide not less than an 90% reduction, by weight, in the overall VOC emissions from the coating line and the oxidizer shall have a destruction efficiency of at least 92%, by weight.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the emission testing procedures specified in f)(4).

- (2) Formulation data or US EPA Method 24 or 24A shall be used to determine the VOC content of the coatings and clean up materials.
- (3) The permittee shall conduct, or have conducted, catalyst activity testing using the catalyst sample collected during the annual inspection described in this permit. An intent to test notification shall not be required for catalyst activity testing. The procedures for the catalyst activity test shall be conducted in accordance with the manufacturer's recommendations and as required by the appropriate test method.
- (4) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:
 - a. The emission testing shall be conducted every 5.0 years after the last test that demonstrated compliance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, the overall removal efficiency, and the control efficiency limitations for VOC.
 - c. Methods 1 through 4, and Method 25 or 25A of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rate for VOC.

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

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



- e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" (ITT) notification to the Ohio EPA Northeast District Office. The ITT 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).
 - h. 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 emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA 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.
- g) **Miscellaneous Requirements**
- (1) None.