



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

8/14/2015

Certified Mail

Frank Currens  
Independent Can Company  
1300 Brass Mill Rd.  
PO Box 370  
Belcamp, MD 21017-0370

Yes	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: 0857175008  
Permit Number: P0118841  
Permit Type: OAC Chapter 3745-31 Modification  
County: Montgomery

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](http://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](http://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](http://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 Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: RAPCA



**Permit Number:** P0118841  
**Facility Name:** Independent Can Company  
**Facility ID:** 0857175008  
**Working Copy of a Permit in Progress**

## Response to Comments

Facility ID:	0857175008
Facility Name:	Independent Can Company
Facility Description:	Coating and printing of metal sheets
Facility Address:	1650 Capstone Way Vandalia, OH 45377 Montgomery County
Permit:	P0118841, Permit-To-Install and Operate - OAC Chapter 3745-31 Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Dayton Daily News on 07/11/2015. The comment period ended on 08/10/2015.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

**1. Topic: No Comments were Received.**

- a. Comment: None
- b. Response: None





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Independent Can Company**

Facility ID:	0857175008
Permit Number:	P0118841
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	8/14/2015
Effective:	8/14/2015
Expiration:	3/3/2019





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Independent Can Company

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**Final Permit-to-Install and Operate**  
Independent Can Company  
**Permit Number:** P0118841  
**Facility ID:** 0857175008  
**Effective Date:** 8/14/2015

## Authorization

Facility ID: 0857175008  
Application Number(s): A0053156  
Permit Number: P0118841  
Permit Description: Federally Enforceable PTIO modification to increase uncontrolled VOC emissions limitations and the volume of cleanup solvent use associated with a metal can coating line. The coating activities are controlled with a permanent total enclosure and thermal oxidizer.  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$200.00  
Issue Date: 8/14/2015  
Effective Date: 8/14/2015  
Expiration Date: 3/3/2019  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Independent Can Company  
1650 Capstone Way  
Vandalia, OH 45377

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:

Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280  
(937)225-4435

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
Independent Can Company  
**Permit Number:** P0118841  
**Facility ID:** 0857175008  
**Effective Date:** 8/14/2015

## **Authorization (continued)**

**Permit Number:** P0118841  
**Permit Description:** Federally Enforceable PTIO modification to increase uncontrolled VOC emissions limitations and the volume of cleanup solvent use associated with a metal can coating line. The coating activities are controlled with a permanent total enclosure and thermal oxidizer.

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

<b>Emissions Unit ID:</b>	<b>K001</b>
Company Equipment ID:	C-1
Superseded Permit Number:	P0115665
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Independent Can Company  
**Permit Number:** P0118841  
**Facility ID:** 0857175008  
**Effective Date:** 8/14/2015

## **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**  
Independent Can Company  
**Permit Number:** P0118841  
**Facility ID:** 0857175008  
**Effective Date:** 8/14/2015

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



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



**Final Permit-to-Install and Operate**  
Independent Can Company  
**Permit Number:** P0118841  
**Facility ID:** 0857175008  
**Effective Date:** 8/14/2015

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

**1. K001, C-1 Can Coating Line**

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

Metal can coating Line with natural gas fired drying oven, permanent total enclosure and regenerative 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. b)(1)d.

(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) June 30, 2008	The best available technology (BAT) determination for this emissions unit includes the use of a permanent total enclosure ducted to a regenerative thermal oxidizer (RTO) to reduce volatile organic compound (VOC) emissions from coating application by at least 95%, on a dry weight basis, excluding methane.  The VOC emissions from cleanup materials used in this emissions unit shall not exceed 30.2 tons on a rolling 12-month basis.  See b)(2)a. through b)(2)e. c)(1) and c)(2)
b.	OAC rule 3745-31-05(D) June 30, 2008 (Synthetic Minor to avoid Title V and	The VOC emissions from this emissions unit shall not exceed 52.0 tons on a rolling 12-month basis, including cleanup

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	MACT)	materials.  The emissions of hazardous air pollutants (HAPs), as defined in Section 112(b) of Title III of the Clean Air Act, shall not exceed 9.5 tons for any individual HAP and 24.5 tons for any combination of HAPs, on a rolling 12-month basis, including cleanup materials.  See b)(2)a. through b)(2)e. c)(1) and c)(2)
c.	OAC rule 3745-21-09(B)(6)	The capture and control system shall provide not less than an 81 percent reduction, by weight, in the overall VOC emissions from the coating line and the VOC reduction efficiency of the thermal oxidizer shall not be less than 90 percent, by weight, excluding cleanup materials.
d.	OAC rule 3745-114 and ORC 3704.03(F)	See d)(8) through d)(11) and e)(3).

(2) Additional Terms and Conditions

- a. The permanent total enclosure shall be constructed to totally enclose the application stations, coating reservoirs, and all areas from the application station to the oven and the control device, such that all VOC emissions from coating application are captured, contained, and directed to the RTO. The RTO shall reduce VOC and HAP emissions by at least 95%, on a dry weight basis.

The permanent total enclosure and coating equipment shall be operationally interlocked such that the coating equipment will not operate unless the VOC capture system is in operation.

- b. The permanent total enclosure shall be maintained under negative pressure whenever it is in operation, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an airflow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

- i. Any natural draft openings shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point. An equivalent di

ameter is the diameter of a circle that has the same area as the opening. If the opening is not circular the equivalent diameter (ED) is calculated as follows:

$$ED = (4 \text{ area} / \pi)^{0.5}$$

- ii. The total area of all natural draft openings ( $A_N$ ) shall not exceed 5 percent of the total surface area of the enclosure ( $A_T$ ), i.e., the four walls, floor, and ceiling. The natural draft opening to enclosure area ratio (NEAR) is calculated as follows:

$$NEAR = A_N / A_T$$

- iii. The direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. H<sub>2</sub>O).
- iv. All access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in (b)(2)b.ii. shall be completely closed to any air movement during process operations.
- v. All VOC emissions from coating application shall be captured and contained for discharge through the RTO.

- c. The permanent total enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all of the VOC emissions from coating application this emissions unit.
- d. All of the VOC emissions from coating application in this emissions unit shall be vented to a RTO that shall meet the operational restrictions, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- e. The volume of cleanup materials employed in this emissions unit shall not exceed 8,000 gallons on a rolling 12-month basis.

c) Operational Restrictions

- (1) The permanent total enclosure shall be maintained under negative pressure, with an average facial velocity at each natural draft opening of 200 feet per minute (3,600 m/hr) or greater, whenever the emissions unit is in operation.
- (2) The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation. Negative pressure shall be visually monitored using streamers, plastic flow indicating strips, string, or other visually noticeable flow indicating device that shows the direction of air flow through each natural draft opening to be into the enclosure.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
  - a. the measured diameter of each natural draft opening;
  - b. the distance measured from each natural draft opening to each VOC emitting point;
  - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure four walls, floor, and ceiling;
  - d. the calculation or demonstration that the distance from each VOC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
  - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure four walls, floor, and ceiling.
- (2) The permittee shall perform daily inspections of the permanent total enclosure to ensure that all access doors and windows that are not natural draft openings are closed, and that the direction of air at each natural draft opening is inward, as shown by streamers, smoke tubes, tracer gases, and/or other air flow monitoring devices.

Records shall be maintained of the results of each daily inspection and include any corrective actions taken by the permittee.
- (3) In order to maintain compliance with the emission limitations contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance. The average temperature measured during the performance test completed on November 19, 2014 was 1,330 degrees Fahrenheit.
- (4) 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 is 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  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:

- a. all 3-hour blocks of time, when the emissions unit controlled by the thermal oxidizer was in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was 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.

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

- (5) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from 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.

- (6) The permittee shall collect and record the following information on a monthly basis for the coating and cleanup materials applied in this emissions unit:
- a. The identification of each coating, as applied;
  - b. The VOC concentration of each coating, as applied, in pounds per gallon;
  - c. The volume, in gallons, of each coating applied;
  - d. The uncontrolled VOC emissions from all coatings, as applied, (the sum of  $d)(6)b. \times d)(6)c.$  for all coatings), in tons;
  - e. The overall control efficiency determined for the thermal oxidizer during the most recent compliance demonstration;
  - f. The total controlled VOC emissions from all coatings applied, (the calculation of  $d)(6)d. \times (1 - d)(6)e.$ );
  - g. The identification of each cleanup material employed;
  - h. The VOC content of each cleanup material, in pounds per gallon;
  - i. The volume, in gallons, of each cleanup material employed;
  - j. The rolling 12-month cleanup solvent usage rate, in gallons (the sum of the monthly cleanup material usage rates from  $d)(6)i$  for the previous 12 months);
  - k. The volume, in gallons, of each cleanup material recovered for recycling or disposal;
  - l. The volume, in gallons, of each cleanup material lost to evaporation (the difference of  $d)(6)i. - d)(6)k.$  for each cleanup material);
  - m. The VOC emissions from all cleanup materials employed (the sum of  $d)(6)h. \times d)(6)l$  for each cleanup material);
  - n. The total VOC emissions from all coatings and cleanup materials employed during the month (the sum of  $d)(6)f. + d)(6)m.$ ), in tons; and
  - o. The rolling 12-month VOC emissions rate, in tons, (the sum of the monthly VOC emissions rates from  $d)(6)n.$  for the previous 12 months).
- (7) The permittee shall collect and record the following information for each coating, as applied, and cleanup materials employed in this emissions unit, including water and exempt solvents:
- a. The identification of each coating or cleanup material that contains HAPs;
  - b. The volume, in gallons, of each coating applied that contains HAPs;

- c. The volume, in gallons, of each cleanup material employed that contains HAPs;
- d. The volume, in gallons, of each cleanup material that contain HAPs recovered for recycling or disposal;
- e. The volume, in gallons, of each cleanup material lost to evaporation (the difference of d)(7)c. – d)(7)d. for each cleanup material);
- f. The concentration of each individual HAP, in pounds per gallon, of each coating as applied and cleanup material (the density of each coating and cleanup material, in pounds per gallon, multiplied by the weight percent of each HAP constituent);
- g. The concentration of all HAPs combined, in pounds per gallon, for each coating as applied and cleanup material (the sum of the individual HAP concentrations from d)(7)f. for each coating and cleanup material);
- h. The uncontrolled individual HAP emissions from all coatings as applied, in pounds or tons (the sum of d)(7)b. x d)(7)f. for all coatings);
- i. The uncontrolled emissions of all HAPs combined from all coatings as applied, in tons (the sum of d)(7)b. x d)(7)g. for all coatings);
- j. The overall control efficiency determined for the thermal oxidizer during the most recent compliance demonstration;
- k. The total controlled individual HAP emissions from all coatings as applied, in tons (d)(7)h. x (1 – d)(7)j.);
- l. The total controlled combined HAP emissions from all coatings as applied, in tons (d)(7)i. x (1 – d)(7)j.);
- m. The individual HAP emissions from cleanup materials, in tons (the sum of d)(7)e. x d)(7)f. for each cleanup material);
- n. The combined HAP emissions from cleanup materials, in tons (the sum of d)(7)e. x d)(7)g. for each cleanup material);
- o. The individual HAP emissions from coatings as applied and cleanup material (the sum of d)(7)k. + d)(7)m.)
- p. The combined HAP emissions from coatings as applied and cleanup material (the sum of d)(7)i. + d)(7)n.)
- q. The rolling 12-month individual HAP emissions rate, in tons (the sum of the monthly individual HAP emissions rates from d)(7)o. for the previous 12 months); and
- r. The rolling 12-month combined HAP emissions rate, in tons (the sum of the monthly combined HAP emissions rates from d)(7)p. for the previous 12 months).

(8) The PTIO application for this/these emissions unit K001 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

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

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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 contaminants:

Toxic Contaminant: xylene  
TLV (mg/m<sup>3</sup>): 651  
Maximum Hourly Emission Rate (lbs/hour): 1.62

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 66  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 10,800

Toxic Contaminant: isophorone  
TLV ( $\text{mg}/\text{m}^3$ ): 28.3  
Maximum Hourly Emission Rate (lbs/hour): 1.30  
Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 53  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 706

The permittee, has demonstrated that emissions of xylene and isophorone from emissions unit K001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

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

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO 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.

- (10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (11) 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) The permittee shall submit quarterly deviation (excursion) reports that identify:
    - a. All periods of time during which the air flow indicating strips or other flow indicating device, at any natural draft opening, showed no air flow or air flow in a direction leaving the enclosure;
    - b. All periods of time during which an access door and/or window, not qualifying as a natural draft opening, was left open during operations;
    - c. All 3-hour blocks of time (when the emissions unit was in operation) during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent performance test that demonstrated the emissions unit was in compliance;
    - d. 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 was in operation;
    - e. Any exceedances of the rolling 12-month VOC emissions limitation;
    - f. Any exceedances of the rolling 12-month individual HAP emissions limitation;

- g. Any exceedances of the rolling 12-month combined HAP emissions limitation;
- h. Any exceedances of the rolling 12-month cleanup material volume limitation;
- i. The probable cause of each deviation; and
- j. Any corrective actions that were taken to remedy the deviations (excursion) or prevent future deviations.

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

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency). Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements

- (1) Compliance with the emissions limitations and control requirements specified in b) shall be determined in accordance with the following methods:
  - a. Emissions Limitation:

The use of a permanent total enclosure ducted to a RTO to reduce VOC emissions by at least 95%, on a dry weight basis, excluding methane.

Applicable Compliance Method:

Compliance shall be based on air emissions testing conducted according to f)(2) and the requirements of OAC rule 3745-21-10, Reference Method 204 of 40 CFR part 51, Appendix M and Reference Method 2 of 40 CFR Part 60, Appendix A for VOC capture efficiency and Reference Method 18, 25 or 25A or 40 CFR Part 60 Appendix A for VOC destruction efficiency.
  - b. Emissions Limitation:

The VOC emissions from this emissions unit shall not exceed 52.0 tons on a rolling 12-month basis, including cleanup materials.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements of d)(6).
  - c. Emissions Limitation:

The emissions of any individual HAP shall not exceed 9.5 tons on a rolling 12-month basis, including cleanup materials.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements of d)(7).
  - d. Emissions Limitation:

The emissions of any combination of HAPs shall not exceed 24.5 tons on a rolling 12-month basis, including cleanup materials.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements of d)(7).
- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted on a recurring five year basis. The last emissions test that demonstrated compliance was completed on November 19, 2014.

- b. The emission testing shall be conducted to demonstrate compliance with the 100% capture efficiency requirement for the permanent total enclosure. The following test methods shall be employed:

Method 204 of 40 CFR Part 51 Appendix M; and

Method 2 of 40 CFR Part 60, Appendix A.

- c. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through each natural draft opening.

- d. Method 2 from 40 CFR Part 60, Appendix A shall be conducted to determine the volumetric flow rate of the exhaust stream(s) exiting the permanent total enclosure, corrected to standard conditions. If the building is being used as the permanent total enclosure, it may be necessary to measure the volumetric flow, corrected to standard conditions, of each gas stream entering the enclosure through a forced makeup air duct, using Method 2. The facial velocity (FV) shall be calculated using the following equation:

$FV = (Q_o - Q_i) / A_n$  where:

$Q_o$  is the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood;

$Q_i$  is the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct, and is equal to zero if there is no forced makeup air into the enclosure; and

$A_n$  is the total area of all natural draft openings in the enclosure.

- e. If the average facial velocity is measured at greater than 500 feet per minute (9,000 m/hr), the direction of air flow shall be assumed to be inward at all times during the compliance demonstration. If the average facial velocity is measured at less than 500 feet per minute, the continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration, either by checking the flow or pressure meter(s) or through the use of streamers, smoke tubes, or tracer gases. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeters using smoke tubes or tracer gases.
- f. The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening:
- i. the diameter of each natural draft opening;
  - ii. the distance measured from each natural draft opening to each VOC emitting point in the process;

- iii. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening;
  - iv. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling; and
  - v. the ratio of the total surface area (sum) of all natural draft openings to the total surface area of the permanent total enclosure.
- g. The control efficiency (i.e., the percent reduction in VOC 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 compounds present and their total concentration, and on a consideration of the potential presence of interfering gases.
- h. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

U.S. EPA Reference Methods 18, 25 and/or 25A of 40 CFR Part 60, Appendix A

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

The testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA.

Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office or local air agency refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment

g) Miscellaneous Requirements

- (1) None.