



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

9/10/2013

Certified Mail

ROBERT GAWRYK  
WARREN FABRICATING CORPORATION  
7845 CHESTNUT RIDGE RD  
HUBBARD, OH 44425

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0278030797  
Permit Number: P0114968  
Permit Type: Renewal  
County: Trumbull

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

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 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  
WARREN FABRICATING CORPORATION**

Facility ID:	0278030797
Permit Number:	P0114968
Permit Type:	Renewal
Issued:	9/10/2013
Effective:	9/10/2013
Expiration:	9/10/2023





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
WARREN FABRICATING CORPORATION

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit? .....	4
3. What records must I keep under this permit? .....	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application? .....	4
6. What happens to this permit if my project is delayed or I do not install or modify my source? .....	5
7. What reports must I submit under this permit? .....	5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? .....	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? .....	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? .....	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? .....	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? .....	7
15. What happens if a portion of this permit is determined to be invalid? .....	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions .....	10
1. F001, Sand Blast Cleaning Area .....	11
2. P001, Large Stress Relief Furnace .....	15
3. R001, Paint Area.....	19





**Final Permit-to-Install and Operate**  
WARREN FABRICATING CORPORATION  
**Permit Number:** P0114968  
**Facility ID:** 0278030797  
**Effective Date:** 9/10/2013

## Authorization

Facility ID: 0278030797  
Application Number(s): A0048104  
Permit Number: P0114968  
Permit Description: PTIO Renewal permit for sandblast area (F001) and stress relief furnace (P001) and renewal permit/administrative modification for Paint Area (R001).  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 9/10/2013  
Effective Date: 9/10/2013  
Expiration Date: 9/10/2023  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

WARREN FABRICATING CORPORATION  
PO BOX 1032  
WARREN, OH 44482

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

  
Scott J. Nally  
Director



**Final Permit-to-Install and Operate**  
WARREN FABRICATING CORPORATION  
**Permit Number:** P0114968  
**Facility ID:** 0278030797  
**Effective Date:** 9/10/2013

## Authorization (continued)

Permit Number: P0114968

Permit Description: PTIO Renewal permit for sandblast area (F001) and stress relief furnace (P001) and renewal permit/administrative modification for Paint Area (R001).

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>F001</b>
Company Equipment ID:	sand blast cleaning area
Superseded Permit Number:	P0086126
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	large stress relief furnace
Superseded Permit Number:	P0086126
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R001</b>
Company Equipment ID:	paint area
Superseded Permit Number:	P0086126
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
WARREN FABRICATING CORPORATION  
**Permit Number:** P0114968  
**Facility ID:** 0278030797  
**Effective Date:** 9/10/2013

## **A. Standard Terms and Conditions**



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

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

**2. Who is responsible for complying with this permit?**

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

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

**3. What records must I keep under this permit?**

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

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

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

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

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

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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



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

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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



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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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



**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**  
WARREN FABRICATING CORPORATION  
**Permit Number:** P0114968  
**Facility ID:** 0278030797  
**Effective Date:** 9/10/2013

## **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**  
WARREN FABRICATING CORPORATION  
**Permit Number:** P0114968  
**Facility ID:** 0278030797  
**Effective Date:** 9/10/2013

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



**1. F001, Sand Blast Cleaning Area**

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

Sand Blast Cleaning Area

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

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

a. None.

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

a. None.

b) **Applicable Emissions Limitations and/or Control Requirements**

(1) The specific 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)	Particulate emissions (PE) shall not exceed 13.5 pounds per hour and 10.8 tons per year.
b.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.
c.	OAC rule 3745-17-08	The control measures established by this rule are less stringent than the control measures established pursuant to OAC rule 3745-31-05(A)(3).

(2) **Additional Terms and Conditions**

a. The permittee shall operate the abrasive blasting within an enclosure for the purpose of reducing fugitive emissions. The enclosure or partial enclosure shall include an overhead roof and it shall also include building walls, curtains, tarps, or other suitable control measures.



Should current control measures prove insufficient for controlling fugitive particulate emissions, Ohio EPA may require additional control measures to be employed.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (2) The permittee shall collect and record the following information for this emissions unit:

- a. the total amount of abrasive blasting material used on a monthly basis, in pounds; and
- b. a yearly summation of the amount of abrasive blasting material used, in pounds.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to Ohio EPA's Northeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible emissions.

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:

PE shall not exceed 13.5 lbs/hr and 10.8 tons/yr.

Applicable Compliance Method:

Compliance with the hourly emissions limitation shall be determined based on a one time calculation by using emission factors from AP-42, Section 13.2-1 (1997 update) for sandblasting (27 lbs/1000 lb abrasive), and the maximum abrasive usage weight rate.

$$E(\text{PE})_{\text{blasting}} = 27 \text{ lbs/1000 lbs abr.} \times 500 \text{ lbs/hr}$$

Compliance with the annual emissions limitation shall be based on a calculation by using emission factors from AP-42, Section 13.2-1 (1997 update) for sandblasting (27 lbs/1000 lbs abrasive), and the abrasive usage weight rate from d)(2)b.

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

- (2) Emission Limitation

Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.



Applicable Compliance Method

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

- g) Miscellaneous Requirements
  - (1) None.



**2. P001, Large Stress Relief Furnace**

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

Large Stress Relief Furnace

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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)	Particulate emissions (PE) shall not exceed 0.35 pound per hour and 1.5 tons/year.  Nitrogen oxides (NOx) emissions shall not exceed 4.61 pounds per hour and 20.2 tons/year.  Carbon monoxide (CO) emissions shall not exceed 1.85 pounds per hour and 8.1 tons/year.  Volatile organic compound (VOC) emissions shall not exceed 0.25 pound per hour and 1.1 tons/year.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-10	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA's Northeast District Office 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered. The PER shall include identification of the following:

a. the day(s) during which a fuel other than natural gas was burned in the furnace, including the type and quantity of fuel used.

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 :

NOx emissions shall not exceed 4.61 lbs/hr and 20.2 tons/yrNOx.

Applicable Compliance Method:

Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum capacity of the gas burners.



$$E(\text{NOx}) = 0.046 \text{ MM scf/hr} \times 100 \text{ lbsNOx/10E6 scf (AP-42)} = 4.61 \text{ lbs/hr}$$

Annual emissions are determined by multiplying the hourly emissions by 8760 hrs/year and dividing by 2000 lbs/ton.

If required pursuant to OAC 3745-15-04, the permittee shall demonstrate compliance with the hourly NOx emission limit of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

b. Emission Limitation:

PE shall not exceed 0.35 lb/hr and 1.5 tons/yr PE.

Applicable Compliance Method:

Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum capacity of the gas burners.

$$E(\text{PE}) = 0.046 \text{ MM scf/hr} \times 7.6 \text{ lbs PE /10E6 scf (AP-42)} = 0.35 \text{ lb/hr.}$$

Annual emissions are determined by multiplying the hourly emissions by 8760 hrs/year and dividing by 2000 lbs/ton.

c. Emission Limitation:

CO emissions shall not exceed 1.85 lbs/hr and 8.1 tons/yr CO.

Applicable Compliance Method:

Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum capacity of the gas burners.

$$E(\text{CO}) = 0.046 \text{ MM scf/hr} \times 40 \text{ lbs CO/10E6 scf (AP-42)} = 1.85 \text{ lbs/hr.}$$

Annual emissions are determined by multiplying the hourly emissions by 8760 hrs/year and dividing by 2000 lbs/ton.

d. Emission Limitation:

VOC emissions shall not exceed 0.25 lb/hr and 1.1 tons/yr VOC.

Applicable Compliance Method:

Hourly compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum capacity of the gas burners.



$E(\text{VOC}) = 0.046 \text{ MM scf/hr} \times 5.5 \text{ lbs VOC/10E6 scf (AP-42)} = 0.25 \text{ lb/hr.}$

Annual emissions are determined by multiplying the hourly emissions by 8760 hrs/year and dividing by 2000 lbs/ton.

e. Emission Limitation:

Visible PE from the exhaust stack or egress points serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.



**3. R001, Paint Area**

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

Paint Area

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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)	Volatile organic compound (VOC) emissions shall not exceed 73.5 pounds per day and 12.5 tons per year from coatings and cleanup materials.
b.	OAC rule 3745-21-09(U)(1)(i)	See b)(2)a. below.
c.	OAC rule 3745-17-11(C)	See d)(4) through (6) below.

(2) Additional Terms and Conditions

a. The VOC content of the coatings employed shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.



- (2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for the coating operation and shall maintain this information at the facility for a period of three years:
- a. the name and identification number of each coating, as applied;
  - b. the mass of VOC per volume of each coating, excluding water and exempt solvents, as applied;
  - c. the volume of each coating, excluding water and exempt solvents, as applied; and
  - d. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in OAC 3745-21-10(B)(9) for  $C_{VOC,2}$ .
- (2) The permittee shall collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:
- a. the number of gallons of each coating applied;
  - b. the maximum daily volume-weighted average VOC content calculated for ( $C_{VOC,2}$ );
  - c. the total VOC emissions from all coatings applied, i.e., the product of the "a" times "b";
  - d. the name and identification of each cleanup material employed;
  - e. the VOC content of each cleanup material, in pounds per gallon;
  - f. the number of gallons of each cleanup material employed;
  - g. the total VOC emission rate from all cleanup materials, in pounds or tons, i.e., the summation of the products of "e" times "f" for all cleanup materials employed; and
  - h. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons, the sum of "c" and "g".

These daily records shall be maintained for the purpose of determining annual VOC emissions for the emissions unit.

- (3) The permit to install application for this emissions unit, R001, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC



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

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

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

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

Toxic: methyl propyl ketone

TLV (mg/m3): 704

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 288.0



MAGLC (ug/m3): 16,762

Toxic: n-butyl acetate

TLV (mg/m3): 711

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 288.1

MAGLC (ug/m3): 1692

Toxic: solvesso

TLV (mg/m3): 100

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 288.1

MAGLC (ug/m3): 13,619

The permittee, has demonstrated that emissions of, hexylene glycol, from emissions unit R001, 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).

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

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC



3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final 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.

- (5) 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.
- (6) 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 notify the Director (appropriate District Office or local air agency) in writing of each daily record showing the application of a coating with greater than 3.5 pounds VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of each such record and it shall be sent to the appropriate District Office or local air agency within 30 days following the end of the calendar month during which the non-compliant coating was applied.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the



due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. The annual compliance reports shall include:

- a. a statement as to whether the coating operation was in compliance with each of the listed applicable rules and requirements, including the limitation on the VOC content of each coating applied; and whether the records of the coating and cleanup material usage demonstrated that annual emissions, as calculated in d)(3), did not exceed the ton per year VOC limit; and
- b. identification of any period of time (date and number of hours) when the dry filtration system was not in service or was not operating in accordance with the manufacturer's or permittee's documented instructions during coating operations.

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. Emissions Limitation:

The VOC content of the coatings employed shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1). The mass of VOC per volume of each coating, excluding water and exempt solvents, as applied, shall be calculated as follows:

$C_{VOC,2}$  is the VOC content in pounds of VOC per gallon of coating, excluding water and exempt solvents.

$$C_{VOC,2} = (D_C)(W_{VOC}) / (V_S + V_{VOC})$$

where:

$D_C$  = the density of coating, in pounds of coating per gallon of coating.

$$W_{VOC} = W_{VM} - W_W - W_{ES}$$

$V_S$  = volume fraction of solids (nonvolatile matter) in coating, in gallons of solids per gallon of coating.

$$V_{VOC} = V_{VM} - V_W - V_{ES}$$



$W_{VM}$  = weight fraction of volatile matter in coating, in pound of volatile matter per pound of coating.

$W_W$  = weight fraction of water in coating, in pound of water per pound of coating.

$W_{ES}$  = weight fraction of exempt solvent in coating, in pound of exempt solvent per pound of coating.

$V_{VM}$  = volume fraction of volatile matter in coating, in gallon of volatile matter per gallon of coating.

$V_W$  = volume fraction of water in coating, in gallon of water per gallon of coating.

$V_{ES}$  = volume fraction of exempt solvent in coating, in gallon of exempt solvent per gallon of coating.

b. Emissions Limitation:

VOC emissions shall not exceed 73.5 pounds per day and 12.5 tons per year from coatings and cleanup materials.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(2).

- (2) In accordance with OAC rule 3745-21-10, U.S. EPA Method 24 shall be used to determine the VOC content of coatings and cleanup materials, where formulation data is not based on the same method or if it is determined to be necessary by the Director.
- (3) In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood Counties shall use U.S. EPA Method 24 to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

g) Miscellaneous Requirements

- (1) None.