



11/18/2014

Jeremy Kern
STANWADE METAL PRODUCTS
PO Box 23
Hartford, OH 44424

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0278000655
Permit Number: P0117789
Permit Type: Renewal
County: Trumbull

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

Certified Mail

Table with 2 columns: No, and various permit categories like TOXIC REVIEW, SYNTHETIC MINOR TO AVOID MAJOR NSR, CEMS, MACT/GACT, NSPS, NESHAPS, NETTING, MODELING SUBMITTED, SYNTHETIC MINOR TO AVOID TITLE V, FEDERALLY ENFORCABLE PTIO (FEPTIO), SYNTHETIC MINOR TO AVOID MAJOR GHG.

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
STANWADE METAL PRODUCTS**

Facility ID:	0278000655
Permit Number:	P0117789
Permit Type:	Renewal
Issued:	11/18/2014
Effective:	11/18/2014
Expiration:	11/18/2024



Division of Air Pollution Control
Permit-to-Install and Operate
for
STANWADE METAL PRODUCTS

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Authorization

Facility ID: 0278000655
Application Number(s): A0048652
Permit Number: P0117789
Permit Description: PTIO renewal for a shot blasting unit and two tank coating booths.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 11/18/2014
Effective Date: 11/18/2014
Expiration Date: 11/18/2024
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

STANWADE METAL PRODUCTS
6868 STATE RTE 305
Hartford Twp., OH 44424

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

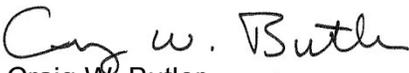
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install and Operate
STANWADE METAL PRODUCTS
Permit Number: P0117789
Facility ID: 0278000655
Effective Date: 11/18/2014

Authorization (continued)

Permit Number: P0117789

Permit Description: PTIO renewal for a shot blasting unit and two tank coating booths.

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

Emissions Unit ID:	F002
Company Equipment ID:	blasting operation
Superseded Permit Number:	02-19690
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K001
Company Equipment ID:	tank coating operation
Superseded Permit Number:	02-1891
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	small tank painting operation
Superseded Permit Number:	02-21346
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
STANWADE METAL PRODUCTS
Permit Number: P0117789
Facility ID: 0278000655
Effective Date: 11/18/2014

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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



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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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



Final Permit-to-Install and Operate
STANWADE METAL PRODUCTS
Permit Number: P0117789
Facility ID: 0278000655
Effective Date: 11/18/2014

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) According to the facility PTE calculations for HAPS, individual HAP emissions do not exceed 10 tons per year and combined HAPs do not exceed 25 tons per year. Modeling was conducted for xylene emissions (PTI 02-1891).



Final Permit-to-Install and Operate
STANWADE METAL PRODUCTS
Permit Number: P0117789
Facility ID: 0278000655
Effective Date: 11/18/2014

C. Emissions Unit Terms and Conditions



1. F002, Blasting Operation

Operations, Property and/or Equipment Description:

Blasting operation cleaning of metal using steel shot/steel grit with baghouse control system.

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 3.0 pounds per hour and 13.1 tons per year. Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(B)	This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-08(B)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The emissions from each emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0 to 3 inches of water.
 - (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range 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 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:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. 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.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and 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 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.

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 PER shall cover a reporting period of no more than 12 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions and the operations of the baghouse during the 12-month reporting period for this emissions unit:
 - a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
 - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - c. 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;
 - d. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust;
 - e. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - f. each incident of deviation described in "e" (above) where a prompt investigation was not conducted;
 - g. each incident of deviation described in "e" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and



- h. each incident of deviation where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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:

Particulate Emissions (PE) from this emissions unit shall not exceed 3.0 pounds per hour and 13.1 tons per year.

Applicable Compliance Method:

To determine the actual hourly emission rate for particulate emissions, the following equation may be used:

$$E = (27 \text{ lbs PE}/1,000 \text{ lbs abrasive material}) (AB) (1 - 0.98) / (H)$$

where:

E = the average hourly emission rate of PE;

27 lbs PE/1,000 lbs abrasive material = the emission factor for particulates from AP-42, Table 13.2.6-1, "Emission Factors for Uncontrolled Abrasive Blasting Operations", October 1997;

AB = the amount of abrasive material used in this operation per day;

H = the total hours of operation per day for the blasting operation; and

1 - 0.98 = a correction for the control efficiency of 98%.

If required, compliance with the PE limitation listed above shall be determined in accordance with Test Method 5 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (3.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

- b. Emission Limitations:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average, except as provided by the rule.



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Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by 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.



2. K001, Tank Coating

Operations, Property and/or Equipment Description:

Tank Coating Operation

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 compounds (VOC) emissions shall not exceed 20.5 tons per year.
b.	OAC rule 3745-21-09(U)(1)(c)	VOC emissions shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average, for all coatings.
c.	OAC rule 3745-17-11(C)	See d)(4) through (6) below.

(2) Additional Terms and Conditions

a. None.



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 operations:
 - a. the name and identification number of each coating applied;
 - b. the VOC content (excluding water and exempt solvents) of each coating as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for $C_{VOC,2}$, in pounds VOC/gallon of coating;
 - c. the number of gallons of each coating applied;
 - d. the VOC emissions from each coating applied, i.e., d)(1)b. times d)(1)c for each coating, in pounds of VOC/coating;
 - e. the daily VOC emissions from all the coatings applied, i.e., the sum of d)(1)d. for all coatings, in pounds of VOC/day;
 - f. the total number of gallons of all coatings applied;
 - g. the number of hours of operation; and
 - h. the daily average gallons of coating applied per hour.

The coatings VOC content and usage records shall be maintained for a minimum of 3 years.

- (2) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material employed, in pounds per gallon;
 - d. the total VOC emissions from all cleanup materials employed, in pounds, i.e., the sum of d)(2)b. times d)(2)c. for each cleanup employed;



- e. if cleanup materials are collected for off-site disposal and/or recovery, the following records shall be maintained if a credit is to be applied to the monthly VOC emissions:
 - i. the amount of cleanup material recovered during the month* for off-site disposal and/or recovery, in gallons (or pounds, if records of recovered cleanup material is maintained by weight and VOC content in percent by weight);
 - ii. the VOC content of the recovered cleanup material shall be based on the lowest VOC content of any cleanup material collected, in pounds per gallon (or percent by weight); or it may be based upon a laboratory analyses provided by the facility to which the waste solvent is shipped;
 - iii. the date the recovered cleanup material was shipped, the amount shipped (minus the container), and the name and address of the receiving, disposal, and/or recovery facility; and
- f. the total monthly VOC emission from cleanup operations, in pounds, i.e., [d)(2)d.] – [d)(2)e.i. x d)(2)e.ii.].

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

- (3) The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in d)(1)e. plus the sum of the monthly emissions from cleanup materials for the calendar year in d)(2)d. or d)(2)f.
- (4) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, and/or operating manual and/or in accordance with any documented modifications deemed necessary by the permittee. The inspection frequency shall be based upon the recommendation of the manufacturer.
- (5) In addition to the recommended periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system at least once per year while the coating operations are shut down and shall perform any needed maintenance and repair.
- (6) The permittee shall maintain the following information for the dry filtration system:
 - a. documentation of the manufacturer's recommendations, instructions, or operating manual, along with documentation of any modifications deemed necessary by the permittee;
 - b. any period(s) of time when the dry filtration system was not in service when the emissions unit was in operation;



- c. any period(s) of time (during coating operations) when the dry filtration system was not operating according to the manufacturer's recommendations and/or according to documented modifications to the manufacturer's recommendations deemed necessary by the permittee; and
- d. records for each inspection (periodic and annual) of the dry filtration system to include the following information:
 - i. the date of the inspection;
 - ii. a description of each/any problem identified and the date it was corrected;
 - iii. a description of any maintenance and repairs performed and the date; and
 - iv. the name of person who performed the inspection.

The manufacturer's operation manual, along with any documented modifications determined necessary by the permittee, shall be maintained at the facility at all times. Records of malfunction, maintenance, and inspections of the dry filtration system shall be maintained for a period of not less than five years from the date of record and shall be made available to the Ohio EPA upon request.

- (7) The permit to install for this emissions unit [K001] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: xylene

TLV (mg/m³): 434

Maximum Hourly Emission Rate (lbs/hr): 2.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 788

MAGLC (ug/m³): 110,333

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

e) Reporting Requirements

- (1) The permittee shall notify the Director (Ohio EPA's Northeast District Office) 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 Ohio EPA's Northeast District Office 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:

20.5 tons of VOC per year from coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(3).

(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.

a. 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.



3. K002, Small Tank Painting Operation

Operations, Property and/or Equipment Description:

Small Tank Coating

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 55.4 pounds per day, on a monthly average basis, and 10.63 tons per year.
b.	OAC rule 3745-21-09(U)(1)(c)	VOC emissions shall not exceed 3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average, for all coatings.
c.	OAC rule 3745-17-11(C)	See d)(4) through (6) below.

(2) Additional Terms and Conditions

a. None.



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 operations:
 - a. the name and identification number of each coating applied;
 - b. the VOC content (excluding water and exempt solvents) of each coating as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for $C_{VOC,2}$, in pounds VOC/gallon of coating;
 - c. the number of gallons of each coating applied;
 - d. the VOC emissions from each coating applied, i.e., d)(1)b. times d)(1)c for each coating, in pounds of VOC/coating;
 - e. the daily VOC emissions from all the coatings applied, i.e., the sum of d)(1)d. for all coatings, in pounds of VOC/day;
 - f. the total number of gallons of all coatings applied;
 - g. the number of hours of operation; and
 - h. the daily average gallons of coating applied per hour.

The coatings VOC content and usage records shall be maintained for a minimum of 3 years.

- (2) The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material employed, in pounds per gallon;
 - d. the total VOC emissions from all cleanup materials employed, in pounds, i.e., the sum of d)(2)b. times d)(2)c. for each cleanup employed;



- e. the total days of operation of the coating line each month;
- f. the average daily VOC emission rate in pounds of VOC per day (this shall be calculated by dividing (d) by (e) for each month);
- g. if cleanup materials are collected for off-site disposal and/or recovery, the following records shall be maintained if a credit is to be applied to the monthly VOC emissions:
 - i. the amount of cleanup material recovered during the month* for off-site disposal and/or recovery, in gallons (or pounds, if records of recovered cleanup material is maintained by weight and VOC content in percent by weight);
 - ii. the VOC content of the recovered cleanup material shall be based on the lowest VOC content of any cleanup material collected, in pounds per gallon (or percent by weight); or it may be based upon a laboratory analyses provided by the facility to which the waste solvent is shipped;
 - iii. the date the recovered cleanup material was shipped, the amount shipped (minus the container), and the name and address of the receiving, disposal, and/or recovery facility; and
- h. the total monthly VOC emission from cleanup operations, in pounds, i.e., [d)(2)d.] – [d)(2)g.i. x d)(2)g.ii.].

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

- (3) The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in d)(1)e. plus the sum of the monthly emissions from cleanup materials for the calendar year in d)(2)d. or d)(2)h.
- (4) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, and/or operating manual and/or in accordance with any documented modifications deemed necessary by the permittee. The inspection frequency shall be based upon the recommendation of the manufacturer.
- (5) In addition to the recommended periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system at least once per year while the coating operations are shut down and shall perform any needed maintenance and repair.
- (6) The permittee shall maintain the following information for the dry filtration system:



- a. documentation of the manufacturer's recommendations, instructions, or operating manual, along with documentation of any modifications deemed necessary by the permittee;
- b. any period(s) of time when the dry filtration system was not in service when the emissions unit was in operation;
- c. any period(s) of time (during coating operations) when the dry filtration system was not operating according to the manufacturer's recommendations and/or according to documented modifications to the manufacturer's recommendations deemed necessary by the permittee; and
- d. records for each inspection (periodic and annual) of the dry filtration system to include the following information:
 - i. the date of the inspection;
 - ii. a description of each/any problem identified and the date it was corrected;
 - iii. a description of any maintenance and repairs performed and the date; and
 - iv. the name of person who performed the inspection.

The manufacturer's operation manual, along with any documented modifications determined necessary by the permittee, shall be maintained at the facility at all times. Records of malfunction, maintenance, and inspections of the dry filtration system shall be maintained for a period of not less than five years from the date of record and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) The permittee shall notify the Director (Ohio EPA's Northeast District Office) 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 Ohio EPA's Northeast District Office 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;



- b. whether the records of the coating and cleanup material usage demonstrated that daily emissions, on a monthly average basis, as calculated in d)(2), did not exceed the daily limit;
- c. whether the records of the coating and cleanup material usage demonstrated that the annual emissions, as calculated in d)(3), did not exceed the ton per year VOC limit; and
- d. 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 55.4 pounds per day, on a monthly average basis.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

c. Emissions Limitation:

10.63 tons of VOC per year from coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(3).

(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.

a. 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.