



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

11/2/2016

Certified Mail

Philip Schrock
Schrock Structures Inc/Tuscarawas Valley Builders LLC
8191 Navarre Rd SW
Massillon, OH 44646

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1576135027
Permit Number: P0121493
Permit Type: Initial Installation
County: Stark

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**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Canton City Health Department at (330)489-3385 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: Canton



FINAL

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

Schrock Structures Inc/Tuscarawas Valley Builders LLC

Facility ID:	1576135027
Permit Number:	P0121493
Permit Type:	Initial Installation
Issued:	11/2/2016
Effective:	11/2/2016
Expiration:	11/2/2026



Division of Air Pollution Control
Permit-to-Install and Operate
for
Schrock Structures Inc/Tuscarawas Valley Builders LLC

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Authorization

Facility ID: 1576135027
Application Number(s): A0056680
Permit Number: P0121493
Permit Description: Installation of three fully enclosed spray booths for the purpose of enclosing stain and paint coating operations that were previously performed outdoors at this facility. The operations consist of airless spray application of coatings to the exterior of wood storage buildings manufactured at the facility.
Permit Type: Initial Installation
Permit Fee: \$1,000.00
Issue Date: 11/2/2016
Effective Date: 11/2/2016
Expiration Date: 11/2/2026
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Schrock Structures Inc/Tuscarawas Valley Builders LLC
8191 Navarre Rd SW
Massillon, OH 44646

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

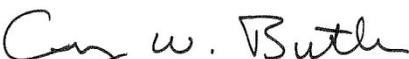
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

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



Authorization (continued)

Permit Number: P0121493

Permit Description: Installation of three fully enclosed spray booths for the purpose of enclosing stain and paint coating operations that were previously performed outdoors at this facility. The operations consist of airless spray application of coatings to the exterior of wood storage buildings manufactured at the facility.

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

Group Name: Spray Booths

Emissions Unit ID:	K001
Company Equipment ID:	Staining Operation
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	Painting Operation
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K003
Company Equipment ID:	Spray Booth 3 (east)
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Schrock Structures Inc/Tuscarawas Valley Builders LLC
Permit Number: P0121493
Facility ID: 1576135027
Effective Date: 11/2/2016

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
Schrock Structures Inc/Tuscarawas Valley Builders LLC
Permit Number: P0121493
Facility ID: 1576135027
Effective Date: 11/2/2016

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) 2. below (Selected definitions)
 - 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.

2. Selected definitions:

As-applied: the formulation of a coating during the application on, or impregnation into a substrate, including any dilution solvents or thinners (or other components) added at the source before application of the coating. [OAC rule 3745-21-01(D)]

As-received: the formulation of a coating material or component (e.g., one-part coating, each component of two-part coatings, thinner, reducer, colorant, or other additive) as received from the supplier. As-received is equivalent to "as-supplied" and "as-purchased."

Cleaning material: a solvent used to remove contaminants and other materials such as dirt, grease, oil, and dried (e.g., depainting) or wet coating from a substrate before or after coating application; or from equipment associated with a coating operation, such as spray booths, spray guns, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both. [OAC rule 3745-21-01(D)]

Coating or surface coating: a material applied onto or saturated within a substrate for decorative, protective or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, adhesives and inks. [Adapted from OAC rule 3745-21-01(D)]

Coating line: an operation consisting of a series of one or more coating applicators and any associated flash-off areas, drying areas and ovens wherein a surface coating is applied, dried, and/or cured. It is not necessary for an operation to have an oven, or flash-off area, or drying area in order to be included within this definition. [OAC rule 3745-21-01(D)]

Exempt solvent: 1. volatile matter in a coating or cleaning material other than VOC or water. [OAC rule 3745-21-10(B)(5)] 2. any of the organic compounds that are specifically identified as exempt under the definition of "volatile organic compound" in paragraph (B)(16) of OAC rule 3745-21-01.

Hazardous air pollutant (HAP): any air pollutant listed under Section 112(b) of the Clean Air Act (USC Section 7412).

One-part, or one-component coating: a coating that is ready for application as it comes out of its container to form an acceptable dry film. For the purpose of this definition, a thinner, necessary to reduce the viscosity, is not considered a component. [Adapted from OAC rule 3745-21-01(D)]

Organic compound (OC): any chemical compound containing carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, ammonium carbonate, methane (except methane from landfill gases), and ethane. [OAC rule 3745-21-01(B)]

Solids: all nonvolatile matter in a coating material. Percent solids + percent volatile matter = 100%.

Toxic air contaminant (TAC): an air contaminant that has been identified by the Ohio EPA as having known toxicological effects, pursuant to ORC 3704.03(F)(3)(c). The complete list of toxic air contaminants regulated in Ohio can be found in OAC rule 3745-114-01.

Transfer efficiency (TE): the percentage of total coating solids employed by a coating applicator which adheres to the object being coated. [OAC rule 3745-21-01(D)]

Two-part, or two-component coating: a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film. May also be known as a multi-component coating, especially if the as-applied mixture includes another additive material in addition to the catalyst or hardener. [Adapted from OAC rule 3745-21-01(D)]

Volatile matter: all non-solid matter in a coating material, including water. Percent solids + percent volatile matter = 100%.

Volatile organic compounds (VOC): a subset of organic compounds (OC) that participate in atmospheric photochemical reactions. Organic compounds that are specifically identified as *not* being “volatile organic compounds” are listed under the definition of “volatile organic compound” in paragraph (B)(16) of OAC rule 3745-21-01. When used in coating or cleaning materials, those compounds in the list just described are known as “exempt solvents.”



Final Permit-to-Install and Operate
Schrock Structures Inc/Tuscarawas Valley Builders LLC
Permit Number: P0121493
Facility ID: 1576135027
Effective Date: 11/2/2016

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Spray Booths: K001, K002 and K003

EU ID	Operations, Property and/or Equipment Description
K001	Spray Booth 1 (west). 1 of 3 identical, adjacent spray booths, 22.5'W x 60'L x 17'H, fully enclosed, with two 9350 acfm exhaust fans. K001 is at the west end of the building and shares one exhaust fan with K002, such that K001 and K002 cannot both operate at the same time. Particulate emissions from overspray are controlled by dry, passive, paint-arrestor type filters. K001 is intended primarily for applying paint to the exterior of wood storage buildings manufactured at this facility. Depending on customer demand, this booth may also be used to apply stain/sealant material.
K002	Spray Booth 2 (middle). 1 of 3 identical, adjacent spray booths, 22.5'W x 60'L x 17'H, fully enclosed, with two 9350 acfm exhaust fans. K002 is located between K001 and K003 and shares one exhaust fan with K001 and one with K003, such that K002 cannot operate while either K001 or K003 are operating. Particulate emissions from overspray are controlled by dry, passive, paint-arrestor type filters. K002 is intended primarily for applying stain/sealant material to the exterior of wood storage buildings manufactured at this facility. Depending on customer demand, this booth may also be used to apply paint.
K003	Spray Booth 3 (east). 1 of 3 identical, adjacent spray booths, 22.5'W x 60'L x 17'H, fully enclosed, with two 9350 acfm exhaust fans. K003 is the eastern-most of the three booths and shares one exhaust fan with K002 such that K002 and K003 cannot both operate at the same time. Particulate emissions from overspray are controlled by dry, passive, paint-arrestor type filters. K003 is intended primarily for applying stain/sealant material to the exterior of wood storage buildings manufactured at this facility. Depending on customer demand, this booth may also be used to apply paint.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. b)(1)c., b)(1)f., b)(2)b., d)(7)-d)(10), and e)(1)c.
 - (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.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3) [Best Available Technology (BAT)]	Emissions of volatile organic compounds (VOC) from emissions units K001-K003 combined shall not exceed 2.21 tons per month averaged over a twelve-month rolling period.
b.	OAC rule 3745-31-05(A)(3) [Best Available Technology (BAT)]	Particulate emissions with an aerodynamic diameter less than or equal to ten micrometers (PE/PM ₁₀) shall be controlled by installing a dry filter system that is designed to have an overall control efficiency of at least 95% for PE/PM ₁₀ . See c)(1)-c)(3) and d)(2)-d)(6) below. See b)(2)a. below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii) [less than 10 tpy BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM ₁₀ emissions from this air contaminant source, since the calculated uncontrolled annual emission rate is less than ten tons per year. See b)(2)b. below.
d.	OAC rule 3745-17-07(A) [Visible particulate emission limitations for stack emissions]	The limitations established pursuant to paragraph (A)(1) of this rule do not apply to this emissions unit because it qualifies for an exemption pursuant to paragraph (A)(3)(h) of this rule, specifically because it is not subject to any mass emission limitation under any of the rules listed therein. Specifically, one of the rules listed in 3745-17-07(A)(3)(h) is OAC rule 3745-17-11, but as a surface coating process, this emissions unit is subject to paragraph (C) instead of paragraph (B) of rule 3745-17-11, and paragraph (C) contains no mass emission limitations.
e.	OAC rule 3745-17-11(C) [Restrictions on particulate emissions from industrial processes; requirements for surface coating processes]	Pursuant to paragraph (C)(3) of this rule, the control device and work practice requirements in paragraphs (C)(1)-C(2) of this rule do not apply since this permit identifies (in b)(1)b. above) particulate emission limitations and control measures



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		based on best available technology. See b)(2)a. and b)(2)b. below.
f.	ORC 3704.03(F)(4) OAC rule 3745-114-01 [Toxic Air Contaminants]	See d)(7) – d)(10), and e)(1)c. below.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for PE/PM₁₀ in b)(1)b. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. The exemption for PE/PM₁₀ described in b)(1)c. above applies once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP. In that case only, the following Terms and Conditions shall apply:
 - i. Surface coating processes performed in emissions units K001-K003 shall be subject to the control device and work practice requirements in paragraphs (C)(1)-(C)(2) of OAC rule 3745-17-11(C). See c)(1)-c)(3) and d)(2)-d)(6) below.

Comment: Effectively, the only change for the permittee once the less than 10 tons per year BAT exemption applies is that dry particulate filtration system will not have to meet a specific design requirement of 95% minimum overall control efficiency for PE/PM₁₀.

c) Operational Restrictions

- (1) The permittee shall operate a dry filtration system for the control of particulate emissions for each of the emissions units in this group; i.e., K001, K002, and K003, whenever the respective emissions unit is in operation, and shall maintain each dry particulate filter system 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 dry particulate filter system for emissions unit K001, K002, or K003 is not operating in accordance with the manufacturer’s recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee, the dry particulate filter system shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- (3) Emissions units K001 and K003 were designed to operate independently, so there shall be no restriction against them operating simultaneously. Emissions unit K002, however, was designed to share one-half of its filter-exhaust fan system and associated stack with

K001, and the other half of its filter-exhaust fan system and associated stack with K003. Therefore, in order to achieve proper filtration of particulate emissions and proper exhaust rate for the dispersion of toxic air contaminants, K002 shall not be operated (for coating spray operations) while either K001 or K003 are operating.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month*. The information does not have to be kept on a line-by-line basis, i.e., it does not have to be kept for emissions units K001, K002, and K003 separately, although the permittee may choose to do so.

*It may be more convenient to keep the records required below on a daily basis, but the minimum required frequency is monthly, which corresponds to the requirements in d)(1)e. and f. below to record a monthly summary of VOC emissions and to update the monthly average based on a rolling 12-month summation.

- a. the name and/or identification number of each coating material or coating component employed, as-received from the supplier (examples include paint, stain, sealant, thinners or reducers, and cleaning materials that contain VOC);
 - b. the actual VOC content, in pounds per gallon, of each material identified in "a" above, calculated in accordance with the procedure described for $C_{VOC,1}$ in g)(1) below, under Miscellaneous Requirements;
 - c. the volume, in gallons, of each material identified in "a" above that is employed during the month (in the case of cleaning materials that contain VOC, the number of gallons employed shall mean the net number of gallons, defined as the gross number of gallons employed during the month minus the number of gallons recovered and/or sent off-site for disposal during the month);
 - d. the monthly VOC emissions, in pounds, for each material identified in "a" above, to be calculated by multiplying the actual VOC content from "b" above by the volume employed from "c" above;
 - e. the total monthly VOC emissions, in tons, from all coating-related materials and all cleaning materials that contain VOC that are employed in emissions units K001-K003 combined, to be calculated as the sum of the monthly emissions in pounds from each material as recorded in "d" above, then divided by 2000 lb/ton.
 - f. the average monthly VOC emissions, in tons, for emissions units K001-K003 combined, averaged over a twelve-month rolling period (or averaged over the actual number of months during the first 12 months of operation following the issuance of this permit).
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for each dry particulate filter system serving emissions units K001-K003, along with documentation of any modifications deemed necessary by the permittee.

- (3) The permittee shall conduct periodic inspections of each dry particulate filter system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals, with any modifications deemed necessary by the permittee. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.
- (4) In addition to the recommended periodic inspections described in (5) above, not less than once each calendar year the permittee shall conduct a comprehensive inspection of each dry particulate filter system while the emissions unit is shut down and perform any needed maintenance and repair to ensure it is able to routinely operate in accordance with the manufacturer's recommendations.
- (5) The permittee shall document each inspection (periodic and annual) of each dry particulate filter system and shall maintain the following information:
 - a. the date of the inspection;
 - b. a description of each/any problem identified and the date it was corrected;
 - c. a description of any maintenance and repairs performed; and
 - d. the name of person who performed the inspection.
- (6) The permittee shall maintain records that document any time periods when any of the dry particulate filter systems serving emissions units K001-K003 was not in service when its respective emissions unit was in operation, or was not operated in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee, when the emissions unit was in operation.
- (7) The PTIO application for emissions units K001, K002, and K003 was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute," ORC 3704.03(F)(4), was applied for each toxic air contaminant (TAC) listed in OAC rule 3745-114-01, using data from the permit application, and modeling was performed for each TAC emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. Because emissions units K001 and K003 (but not K002) can operate simultaneously (see c)(3) above), the predicted 1-hour maximum ground level concentration result from the approved air dispersion model was determined separately for K001 and K003, with each operating at its maximum hourly emissions rate of 31 lb/hr, then the results were added together. The predicted 1-hour maximum ground level concentration for K001 and K003 combined was then 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 air contaminant emitted from emissions units K001-K003, (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 8-hr TLV was divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This adjusted standard (TLV/10) was then further adjusted from its occupational basis of 8 hours per day and 5 days per week to account for the potential duration of the exposure based on the maximum potential operating hours of the emissions units, which for this facility is 10 hours per day and 6 days per week based on inherent operational limitations as described in the permit application. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground Level Concentration (MAGLC):

$$(TLV/10) \times (8/10) \times (5/6) = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the "worst case" toxic air contaminant from among the significant toxic air contaminants that were evaluated, with "significant" being defined in Engineering Guide No. 69 (Ohio EPA DAPC) as having potential emissions of 1 or more tons/year:

Toxic Contaminant: Stoddard Solvent (CAS No. 8052-41-3)

TLV: 573 mg/m³

Max. Hourly Emission Rate: 31 lb/hr (for each emissions unit)

Predicted 1-Hour Maximum Ground Level Concentration: 6,131 µg/m³
(for emissions units K001 and K003 operating simultaneously at 31 lb/hr emissions rate)

MAGLC: 38,200 µg/m³

The permittee has demonstrated that emissions of the "worst case" toxic air contaminant for the worst case condition of emissions units K001 and K003 operating simultaneously are calculated to be less than 80% 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).

- (8) Prior to making any physical changes to or changes in the method of operation of emissions unit K001, K002, and/or K003 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 K001, K002, and/or K003 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)(4), 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.

- (9) 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)(4):
 - 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 air contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the maximum acceptable ground level concentration (MAGLC) for each significant toxic air contaminant or the worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute," ORC 3704.03(F)(4);
 - 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)(4), initially and for each change that requires reevaluation 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)(4), and documentation of any

determination that was conducted to reevaluate compliance due to a change made to the emissions unit(s) or the materials applied.

- (10) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model that was used to demonstrate compliance with the "Toxic Air Contaminant Statute," ORC 3704.03(F)(4), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) by the due date identified in the Authorization section of this permit, either through the Ohio EPA's eBusiness Center: Air Services online web portal, or in hard copy form to the Canton City Health Department, Air Pollution Control Division via the U.S. postal service, by hand-delivery, or as a scanned e-mail attachment. Annual PER forms will be mailed to the permittee at the end of the reporting period specified 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 permittee shall also provide the following information in the annual PER:.

- a. all exceedances of the average monthly VOC emissions limitation of 2.21 tons per month, as recorded in d)(1)f. above;
- b. as recorded in d)(6) above, any time periods when the dry particulate filter system was not in service while operations that produce particulate emissions took place, or when the dry particulate filter system was not operated in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee; and
- c. as recorded in d)(10) above, any changes made to a parameter or value used in the dispersion model that was used to demonstrate compliance with the "Toxic Air Contaminant Statute," ORC 3704.03(F)(4), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, the emissions unit(s), or the exhaust stack(s) have been made, then the annual PER shall include an affirmative statement to this effect.

f) Testing Requirements

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

a. Emissions Limitation:

Emissions of volatile organic compounds (VOC) from emissions units K001-K003 combined shall not exceed 2.21 tons per month averaged over a twelve-month rolling period.



Applicable Compliance Method:

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

This emissions limitation was established by calculating the maximum annual potential-to-emit after taking into account inherent operational limitations that limit operating schedule to 10 hr/day and 6 days/wk as described in permit application No. A0056680, received 8/17/2016. The annual PTE was then divided by 12 to establish an average monthly value.

Potential-to-emit calculations:

The maximum potential annual operating hours for the facility were calculated as follows:

$$(10 \text{ hr/day}) \times (6 \text{ days/week}) \times (52 \text{ weeks/yr}) = 3,120 \text{ hr/yr}$$

As described in the permit application, every hour spent in the build operation requires just 0.56 hours of coating time, so this limits the maximum potential annual coating time to 56% of maximum building time:

$$0.56 \times 3,120 \text{ hr/yr}_{\text{MAX BUILDING TIME}} = 1,747 \text{ hr/yr}_{\text{MAX TOTAL COATING TIME}}$$

Also as described in the permit application, for VOC emissions, the expected worst-case distribution of material usage is 85% stain and 15% paint on an annual basis. When applied to 1,747 hr/yr max coating time calculated above, the distribution of stain and paint results in the following maximum hours for the application of each material:

$$85\% \times (1,747 \text{ hr/yr}_{\text{MAX TOTAL COATING TIME}}) = 1,485 \text{ hr/yr}_{\text{MAX STAINING TIME}}$$

$$15\% \times (1,747 \text{ hr/yr}_{\text{MAX TOTAL COATING TIME}}) = 262 \text{ hr/yr}_{\text{MAX PAINTING TIME}}$$

Also as described in the permit application, the average application rates for stain and paint are as follows:

$$7.84 \text{ gal/hr}_{\text{AVG STAIN APPLICATION RATE}}$$

$$6.44 \text{ gal/hr}_{\text{AVG PAINT APPLICATION RATE}}$$

Using the hourly stain and paint application rates calculated above and the assumed maximum hours per year spent applying each material, the maximum potential annual gallons for each would be as follows:

$$1,485 \text{ hr/yr}_{\text{MAX STAINING TIME}} \times 7.84 \text{ gal/hr}_{\text{AVG STAIN APPLICATION RATE}} = 11,642 \text{ gal/yr}_{\text{MAX STAIN USAGE}}$$

$$262 \text{ hr/yr}_{\text{MAX PAINTING TIME}} \times 6.44 \text{ gal/hr}_{\text{AVG PAINT APPLICATION RATE}} = 1,687 \text{ gal/yr}_{\text{MAX PAINT USAGE}}$$

Potential annual emissions were based on the distribution of gallons calculated above for stain and paint and the VOC content of each material:



$$[(11,642 \text{ gal/yr} \times 4.46 \text{ lb}_{\text{VOC}}/\text{gal})_{\text{STAIN}} + (1,687 \text{ gal/yr} \times 0.59 \text{ lb}_{\text{VOC}}/\text{gal})_{\text{PAINT}}] / 2,000 \text{ lb/ton} = 26.46 \text{ ton}_{\text{VOC}}/\text{yr}$$

Finally, the average monthly VOC emissions were calculated as follows:

$$(26.46 \text{ ton}_{\text{VOC}}/\text{yr}) \div (12 \text{ months}/\text{yr}) = 2.205, \text{ rounded to } 2.21 \text{ ton}_{\text{VOC}}/\text{month}$$

b. Control Requirement:

The following control requirement applies only if the Best Available Technology (BAT) requirements in b)(1)a. above apply, i.e., only until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio:

Particulate emissions with an aerodynamic diameter less than or equal to ten micrometers (PE/PM₁₀) shall be controlled by installing a dry filter system that is designed to have an overall control efficiency of at least 95% for PE/PM₁₀.

Applicable Compliance Method:

The overall control efficiency was calculated by multiplying the capture efficiency of 100% by the design control efficiency of 95% of the paint booths (supplied by facility calculations and manufacturer specifications in permit application A0056680).

Ongoing compliance with the control requirement above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(1) through c)(3) above and with the monitoring and recordkeeping requirements listed in terms d)(2)-d)(6) above.

c. Operational Restriction:

Emissions unit K002 shall not be operated (for coating spray operations) while either K001 or K003 are operating.

Applicable Compliance Method:

Each of the three spray booths (emissions units K001-K003) has two exhaust fans, both which must be operated to achieve proper filtration of particulate emissions and proper exhaust rate for the dispersion of toxic air contaminants. As described in c)(3) above, emissions unit K002 (which is located between K001 and K003) was designed to share one of its two exhaust fans with K001 and its other exhaust fan with K003.

As provided by Phil Schrock in an email sent on 10/27/2016, each of the two shared exhaust systems has a baffle that must be set so that suction is provided to only one booth or the other. More importantly, a type of interlock control system exists between the fan switches in each booth and the inlet air vents at the opposite end of each booth. When the fans are started in a given booth, the air inlets open in that booth only to create the proper cross-flow current.

g) Miscellaneous Requirements

Values for material properties required in (1) below shall be determined either by the procedures set forth in U.S. EPA Method 24* or from formulation data provided by the manufacturer of the material, except for individual HAP, individual TAC, and exempt solvents information that can *only* be obtained from formulation data.

* Method 24, as described in 40 CFR Part 60, Appendix A, is applicable for the determination of volatile matter content, water content, density, volume solids, and weight solids of paint, varnish, lacquer, or other related surface coatings.

- (1) The following method shall be used to calculate the actual VOC content ($C_{VOC,1}$), in pounds per gallon, of any liquid material:

$$C_{VOC,1} = (D)(W_{VOC}) \quad \text{See Notes 1. and 2. below}$$

where:

D = the overall density of the material, in pounds per gallon.

W_{VOC} = the weight fraction of VOC in the material, in pounds of VOC per pound of material

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

where:

W_{VM} = the weight fraction of volatile matter in the material, in pounds of volatile matter per pound of material.

[For coatings, if this weight fraction is determined by ASTM D2369-04, "Standard Test Method for Volatile Content of Coatings," the drying conditions shall be one hundred ten degrees Celsius for one hour, except where otherwise authorized by the director based on an alternate analytical procedure that is satisfactorily demonstrated to the director by the coating manufacturer to be more representative of the actual cure mechanism of the coating].

W_W = the weight fraction of water in the material, in pounds of water per pound of material.

W_{ES} = the weight fraction of exempt solvent(s) in the material, in pounds of exempt solvent(s) per pound of material.

Notes for g)(2):

1. For coatings, if the "as-applied" value is required for $C_{VOC,1}$, this will be the same as the "as-received" value only for the case of one-part coatings that are applied without the addition of any thinner, reducer or other additive. For all other cases, see Note 2.
2. For one-part coatings that are thinned or reduced before application (including dilution with water), and for all two-part coatings (which may also include

thinners, reducers or other additives), the “as-applied” value for $C_{VOC,1}$ must be calculated as a volume-weighted average for the coating mixture, in which case the applicable parameter shall be identified as $(C_{VOC,1})_{MIX}$. The following formula shall be used to calculate $(C_{VOC,1})_{MIX}$:

$$(C_{VOC,1})_{MIX} = \sum_{i=1}^n (V_i) (C_{VOC,1i})$$

where:

i = subscript denoting a specific material in the coating mixture.

n = the total number of different materials in the coating mixture.

V_i = the volume fraction of each material “ i ” in the coating mixture, based on the volumetric mix ratio.