



11/14/2014

Certified Mail

Alfred Olivieri
Mr. O's Custom Millwork & Store Fixtures, Inc.
6315 Promway Ave NW
North Canton, OH 44720

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1576175017
Permit Number: P0117718
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**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Canton City Health Department at (330)489-3385 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: Canton



FINAL

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

Mr. O's Custom Millwork & Store Fixtures, Inc.

Facility ID:	1576175017
Permit Number:	P0117718
Permit Type:	Initial Installation
Issued:	11/14/2014
Effective:	11/14/2014
Expiration:	11/14/2024



Division of Air Pollution Control
Permit-to-Install and Operate
for
Mr. O's Custom Millwork & Store Fixtures, Inc.

Table of Contents

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



Final Permit-to-Install and Operate
Mr. O's Custom Millwork & Store Fixtures, Inc.
Permit Number: P0117718
Facility ID: 1576175017
Effective Date: 11/14/2014

Authorization

Facility ID: 1576175017
Application Number(s): A0051851
Permit Number: P0117718
Permit Description: Paint spray booth - initial installation PTIO due to the relocation of K001 from its originally permitted location (Facility ID No. 1576001665 and PTI No. 15-665, issued 5/30/1991), to another facility under the same ownership (Facility ID No. 1576175017). This new permit is being processed after-the-fact, because the relocation actually took place between Aug and Sept 2005.
Permit Type: Initial Installation
Permit Fee: \$200.00
Issue Date: 11/14/2014
Effective Date: 11/14/2014
Expiration Date: 11/14/2024
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Mr. O's Custom Millwork & Store Fixtures, Inc.
6410 Promway Ave NW
North Canton, OH 44720

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

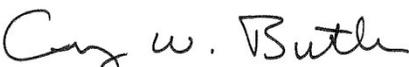
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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



Final Permit-to-Install and Operate
Mr. O's Custom Millwork & Store Fixtures, Inc.
Permit Number: P0117718
Facility ID: 1576175017
Effective Date: 11/14/2014

Authorization (continued)

Permit Number: P0117718
Permit Description: Paint spray booth - initial installation PTIO due to the relocation of K001 from its originally permitted location (Facility ID No. 1576001665 and PTI No. 15-665, issued 5/30/1991), to another facility under the same ownership (Facility ID No. 1576175017). This new permit is being processed after-the-fact, because the relocation actually took place between Aug and Sept 2005.

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

Emissions Unit ID:	K001
Company Equipment ID:	Paint Spray Booth with dry filter
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Mr. O's Custom Millwork & Store Fixtures, Inc.
Permit Number: P0117718
Facility ID: 1576175017
Effective Date: 11/14/2014

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
Mr. O's Custom Millwork & Store Fixtures, Inc.
Permit Number: P0117718
Facility ID: 1576175017
Effective Date: 11/14/2014

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) 3. below (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. The permittee is advised that this facility may be subject to the "Generally Available Control Technology" (GACT) requirements under 40 CFR Part 63, Subpart HHHHHH, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.* The U.S. EPA is responsible for the administration of the requirements of this rule at this time. It should be noted that the enforcement authority of the GACT requirements is not delegated to Ohio EPA at the time of this permit processing. This rule may be applicable to the following emissions unit(s) contained in this permit: K001.

The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the Canton City Health Department, Air Pollution Control Division.

* This facility may be subject to this rule if the facility is an area source (i.e. non-major source) of hazardous air pollutants (HAPs) and performs paint stripping using methylene chloride or spray application of coatings that contain compounds above a given concentration of the following target HAPs: chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or Cadmium (Cd). Specifically, compounds of hexavalent chromium (Cr⁺⁶), lead (Pb), nickel (Ni), or cadmium (Cd) qualify if any of these compounds comprises more than 0.1% by mass of the coating, as-applied; and compounds of trivalent chromium (Cr⁺³) or manganese (Mn) qualify if any of these compounds comprises more than 1.0% by mass of the coating, as-applied.

3. Definition of terms:

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., catalyst, colorant, thinner, reducer, or other additive) as received from the supplier. As-received is equivalent to "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, stains, varnishes, sealers, adhesives and inks. [Adapted from OAC rule 3745-21-01(D)]

Exempt solvents: 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 OAC rule 3745-21-01(B).

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

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):any air pollutant listed in OAC rule 3745-114-01. Ohio EPA has defined the compounds in this list as being subject to regulation [ORC 3704.03(F)] based on their toxicological effects when emitted to the atmosphere.

Transfer efficiency (TE):the percentage of total coating solids employed by a coating applicator that adheres to the object being coated. [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 exempt, i.e., *not* being "volatile organic compounds" are listed under the definition of "volatile organic compound" in OAC rule 3745-21-01(B). 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
Mr. O's Custom Millwork & Store Fixtures, Inc.
Permit Number: P0117718
Facility ID: 1576175017
Effective Date: 11/14/2014

C. Emissions Unit Terms and Conditions



1. K001, Paint Spray Booth

Operations, Property and/or Equipment Description:

Fully enclosed paint spray booth for the application of coatings to wood products. Particulate emissions from paint overspray are controlled by a dry filter system. Parts are air-dried.

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), as effective 10/17/2003 [Best Available Technology (BAT) as applicable for sources installed on or after 10/17/2003 and before 12/1/2006]	Emissions of organic compounds (OC) and volatile organic compounds (VOC) from coatings and cleaning materials combined shall not exceed 14.48 lb/hr and 14.43 lb/hr, respectively, for any single hour. Emissions of organic compounds (OC) and volatile organic compounds (VOC) from coatings and cleaning materials combined shall not exceed 10.25 and 9.52 tons per year, respectively, based upon a rolling, 12-month summation of the monthly emissions. Emissions of PE/PM shall be controlled by the use of a fully enclosed spray booth and compliance with the requirements of



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		OAC rule 3745-17-11(C). See b)(2)a. thru b)(2)c. below.
b.	OAC rule 3745-17-07(A)	<p>The visible particulate emission 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.</p> <p>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 that rule, and paragraph (C) contains no mass emission limitations.</p> <p>See next row, b)(1)c.</p>
c.	OAC rule 3745-17-11(C)	See c)(1) and c)(2), and d)(3) – d)(7) below.
d.	OAC rule 3745-21-15	Exempt. See b)(2)d. below.
e.	ORC 3704.03(F)(4) and OAC rule 3745-114-01 [Toxic Air Contaminants]	Exempt. See d)(8) below.

(2) Additional Terms and Conditions

- a. For OC and VOC emissions, the Best Available Technology (BAT) requirements have also been determined to include the use of materials that achieve compliance with the emissions limitations listed in b)(1)a. above, and compliance with the Monitoring and/or Recordkeeping Requirements listed in terms d)(1) and d)(2) below.
- b. The PTIO application for this emissions unit was evaluated based on actual coating and cleaning materials, and the maximum 1-hour usage rates for these materials, as specified by the permittee. The hourly emissions limitations for OC and VOC are based on the uncontrolled 1-hour potential-to-emit as calculated based on the material having the highest concentration for each pollutant. Therefore, no monitoring, recordkeeping, or reporting requirements are necessary to ensure ongoing compliance with these hourly limitations. The



permittee is hereby advised that changes in the composition of the materials, the use of new materials, or changes in the method of operation that would cause the emissions of OC or VOC to increase to above the hourly limitations in b)(1)a. above shall require the permittee to apply for and obtain a new PTIO.

- c. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the required rolling, 12-month summations of the emissions upon issuance of this permit.
- d. Paragraph (A)(1) of OAC rule 3745-21-15 (Control of volatile organic compound emissions from wood furniture manufacturing operations) states that the rule is applicable only to wood furniture manufacturing operations at facilities located in Ashtabula, Butler, Clermont, Cuyahoga, Geauga, Hamilton, Lake, Lorain, Medina, Portage, Summit, or Warren counties. This facility is exempt from the requirements of this rule because it is located in Stark county, which is not one of the listed counties.

c) **Operational Restrictions**

- (1) The permittee shall operate a dry filtration system for the control of particulate emissions whenever the emissions unit is in operation, and shall operate and maintain the 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 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.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information: for coating materials, the permittee shall use either the Coating As-Applied Option in d)(1)a. below, or the Inventory Option in d)(1)b. below to collect and record the required information. For cleaning materials, the permittee shall use the method in d)(1)c. below:
 - a. Coating As-Applied Option:
This option requires monthly records to be kept on the amount, in gallons, of each coating or coating mixture "as-applied." If choosing this option, the permittee shall collect and record the following information each month:
 - i. the name and/or identification number of each coating material employed, as-received from the supplier (examples of coating materials include the coatings themselves, catalysts, colorants, thinners, reducers, or other additives);
 - ii. for each coating that is not applied directly in the as-received condition, the volumetric mix ratio for the materials (or the volumetric fraction of



each material) in the coating mixture as-applied. Also, the name and/or identification number of each coating mixture as-applied, if the as-applied mixture is uniquely identified by the permittee;

- iii. the organic compound (OC) content, in pounds per gallon, of each coating as-applied, calculated in accordance with the procedure described for OC or OC_{MIX}, whichever is applicable, in g)(1) below;
- iv. the actual VOC content, in pounds per gallon, of each coating as-applied, calculated in accordance with the procedure described for C_{VOC,1} or (C_{VOC,1})_{MIX}, whichever is applicable, in g)(2) below;
- v. the volume, in gallons, of each coating as-applied during the month;
- vi. the monthly OC emissions, in pounds, of each coating as-applied, to be calculated by multiplying the OC content from "iii" above by the volume applied from "v" above;
- vii. the monthly VOC emissions, in pounds, of each coating as-applied, to be calculated by multiplying the actual VOC content from "iv" above by the volume applied from "v" above;
- viii. the total monthly OC emissions, in pounds, from all coatings applied; i.e., the summation of the OC emissions from all coatings from "vi" above; and
- ix. the total monthly VOC emissions, in pounds, from all coatings applied; i.e., the summation of the VOC emissions from all coatings from "vii" above.

b. Inventory Option:

As an alternative to the As-Applied Option in d)(1)a. above, this option requires monthly records to be kept on the amount, in gallons, of each individual coating material employed, in its as-received condition. If choosing this option, the permittee shall collect and record the following information each month:

- i. the name and/or identification number of each coating material employed, as-received from the supplier (examples of coating materials include the coatings themselves, catalysts, colorants, thinners, reducers, or other additives);
- ii. the organic compound (OC) content, in pounds per gallon, of each coating material identified in "i" above, calculated in accordance with the procedure described in g)(1) below;
- iii. the actual VOC content (C_{VOC,1}), in pounds per gallon, of each coating material identified in "i" above, calculated in accordance with the procedure described in g)(2) below;
- iv. the volume, in gallons, of each coating material identified in "i" above that is employed during the month;



- v. the monthly OC emissions, in pounds, from each coating material, to be calculated by multiplying the OC content from "ii" above by the volume employed from "iv" above;
- vi. the monthly VOC emissions, in pounds, from each coating material, to be calculated by multiplying the actual VOC content from "iii" above by the volume employed from "iv" above;
- vii. the total monthly OC emissions, in pounds, from all coating materials employed; i.e., the summation of the OC emissions from all coating materials from "v" above; and
- viii. the total monthly VOC emissions, in pounds, from all coating materials employed; i.e., the summation of the VOC emissions from all coating materials from "vi" above.

c. Cleaning Materials:

The method for cleaning materials is identical to the Inventory Option for coating materials in d)(1)b. above, but is provided as a separate section for clarity. The permitteeshall collect and record the following information each month:

- i. the name and/or identification number of each cleaning material employed;
- ii. the organic compound (OC) content, in pounds per gallon, of each cleaning material identified in "i" above, calculated in accordance with the procedure described in g)(1) below;
- iii. the actual VOC content ($C_{VOC,1}$), in pounds per gallon, of each cleaningmaterial identified in "i" above, calculated in accordance with the procedure described in g)(2) below;
- iv. the net volume, in gallons, of each cleaning material identified in "i" above that is employed during the month(this means the gross number of gallons used minus the number of gallons recovered and/or sent off-site for disposal during the month*);
- v. the monthly OC emissions, in pounds, from each cleaning material, to be calculated by multiplying the OC content from "ii" above by the net volume employed from "iv" above;
- vi. the monthly VOC emissions, in pounds, from each cleaning material, to be calculated by multiplying the actual VOC content from "iii" above by the net volume employed from "iv" above;
- vii. (if more than one cleaning material is employed during the month), the total monthly OC emissions, in pounds, from all cleaning materials employed; i.e., the summation of the OC emissions from all cleaning materials from "v" above; and



viii. (if more than one cleaning material is employed during the month), the total monthly VOC emissions, in pounds, from all cleaning materials employed; i.e., the summation of the VOC emissions from all cleaning materials from "vi" above.

* A daily log may be required for recovered waste cleaning materials in situations 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 material added to the container.

- (2) The permittee shall maintain monthly records of the following information:
 - a. the total OC emissions from coatings applied and cleaning materials employed, in pounds, i.e., the total monthly OC emissions from coatings (from either d)(1)a. - Coating As-Applied Option or d)(1)b. - Inventory Option) plus the total monthly OC emissions from d)(1)c. – Cleaning Materials;
 - b. the total VOC emissions from coatings applied and cleaning materials employed, in pounds, i.e., the total monthly VOC emissions from coatings (from either d)(1)a. - Coating As-Applied Option or d)(1)b. - Inventory Option) plus the total monthly VOC emissions from d)(1)c. – Cleaning Materials;
 - c. the rolling, 12-month summation of OC emissions, in tons; i.e., the sum of all OC emissions, as recorded in "a" above, for the most recent month plus the previous 11 months, divided by 2000 lb/ton; and
 - d. the rolling, 12-month summation of VOC emissions, in tons; i.e., the sum of all VOC emissions, as recorded in "b" above, for the most recent month plus the previous 11 months, divided by 2000 lb/ton.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, and/or operating manuals for the dry particulatefilter system, along with documentation of any modifications deemed necessary by the permittee.
- (4) The permittee shall conduct periodic inspections of the dry particulatefilter system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, and/or operating manual, 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.
- (5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the particulatefilter 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.
- (6) The permittee shall document each inspection (periodic and annual) of the dry particulatefilter 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 the person who performed the inspection.
- (7) The permittee shall maintain records that document any time periods when the dry particulate filter system was not in service 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.
- (8) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4), was not necessary because the emissions unit's maximum annual emissions for each Toxic Air Contaminant, as defined in OAC rule 3745-114-01, will be less than the "Significant Emission Rate" threshold of 1.0 ton per year for modeling, as provided as guidance in Table 3 of the Ohio EPA DAPC Engineering Guide No. 69. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any Toxic Air Contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- e) **Reporting Requirements**
- (1) The report(s) required by this permit may be submitted electronically through the Ohio EPA's eBusiness Center: Air Services online web portal, or they may be mailed or hand-delivered in hardcopy form to the Canton City Health Department, Air Pollution Control Division.
 - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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.
- 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 Limitations:
Emissions of organic compounds (OC) and volatile organic compounds (VOC) from coatings and cleaning materials combined shall not exceed 14.48 lb/hr and 14.43 lb/hr, respectively, for any single hour.



Applicable Compliance Method:

As stated in b)(2)a. above, the hourly emissions limitations for OC and VOC were established based on the uncontrolled 1-hour potential-to-emit (PTE) for these pollutants, and therefore, no monitoring, recordkeeping, or reporting requirements are necessary to ensure ongoing compliance.

Uncontrolled 1-hour potential-to-emit values for OC and VOC were calculated as described below for the coating spray process and cleaning material usage combined, based on the worst-case assumption that parts can be sprayed at the same time that another set of spray guns is being cleaned.

1. The coating spray process:

The maximum short-term (lb/hr) PTE for OC and for VOC was calculated for the coating spray process based on the actual coatings with the highest OC and VOC content, respectively. The same coating, WOODSONG II AMAZING Stain Base had both the highest OC and VOC content, and the two values are equal because this material contains no exempt solvents. Also, this material can be used directly or mixed with a colorant, but the OC/VOC content is higher when it is used directly, so this was the version used for these calculations.

WOODSONG II AMAZING Stain Base

Product Code: WS2VB6

Manufacturer: M. L. Campbell

OC content: 7.07 lb_{OC}/gal

VOC content: 7.07 lb_{VOC}/gal

The maximum short-term coating usage rate is 2.0 gal/hr, as provided by the permittee in the permit application. Accordingly, PTE was calculated as follows:

$$OC_{\text{COATING}}: (2.0 \text{ gal/hr}) \times (7.07 \text{ lb}_{\text{OC}}/\text{gal}) = 14.14 \text{ lb}_{\text{OC}}/\text{hr}$$

$$VOC_{\text{COATING}}: (2.0 \text{ gal/hr}) \times (7.07 \text{ lb}_{\text{VOC}}/\text{gal}) = 14.14 \text{ lb}_{\text{VOC}}/\text{hr}$$

2. Cleaning material usage:

DT-5 Lacquer Thinner is used for cleaning spray guns and associated equipment. As provided by the permittee in the permit application, the maximum short-term usage rate is 0.5 gal/hr (gross). Further, the permittee estimated that 90% of the volume is recovered and disposed as liquid waste. The remaining 10% evaporates. So the estimated net cleaning material usage is 0.5 gal/hr x (1 - 0.90) = 0.05 gal/hr.

DT-5 Lacquer Thinner:

OC content: 6.72 lb_{OC}/gal

VOC content: 5.71 lb_{VOC}/gal

$$OC_{\text{CLEANING}}: (0.05 \text{ gal/hr}) \times (6.72 \text{ lb}_{\text{OC}}/\text{gal}) = 0.34 \text{ lb}_{\text{OC}}/\text{hr}$$



$$VOC_{\text{CLEANING}}: (0.05 \text{ gal/hr}) \times (5.71 \text{ lb}_{\text{VOC}}/\text{gal}) = 0.29 \text{ lb}_{\text{VOC}}/\text{hr}$$

3. The coating spray process and cleaning material usage combined:

$$\text{Total OC} = (14.14 \text{ lb}_{\text{OC}}/\text{hr})_{\text{COATING}} + (0.34 \text{ lb}_{\text{OC}}/\text{hr})_{\text{CLEANING}} = 14.48 \text{ lb}_{\text{OC}}/\text{hr}$$

$$\text{Total VOC} = (14.14 \text{ lb}_{\text{VOC}}/\text{hr})_{\text{COATING}} + (0.29 \text{ lb}_{\text{VOC}}/\text{hr})_{\text{CLEANING}} = 14.43 \text{ lb}_{\text{VOC}}/\text{hr}$$

b. Emissions Limitations:

Emissions of organic compounds (OC) and volatile organic compounds (VOC) from coatings and cleaning materials combined shall not exceed 10.25 and 9.52 tons per year, respectively, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

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

Annual emissions limitations for OC and VOC were established based on the uncontrolled potential-to-emit (PTE) for these pollutants. Because the process for this paint spray booth is not a continuous operation, there is no direct relationship between the maximum 1-hour PTE and the annual PTE. In any 8-hour shift, time must be allowed for such things as coating material changes, part drying, and moving parts into and out of the paint spray booth. In other words, annual PTE could not be calculated by multiplying the maximum 1-hour PTE by 8760 hours per year. Also, because this emissions unit has actually been installed and operating at its present location since approximately September 2005*, it was possible to use historical records for gallons of material used, and annual Fee Emissions Reports for a rough estimate of the corresponding emissions.

* K001 was initially permitted and installed at another facility owned by the same company and located nearby (see Facility ID No. 1576001665 and PTI No. 15-665, issued 5/30/1991.) Approximately Sept 2005, K001 was relocated to its current location, but at that time, the company did not apply for a new PTI. They reported the relocation in their "Blue Card" Fee Emission Report for 2004 & 2005, received 4/10/2006. In October 2007, Canton APC began investigating whether a new PTI was required, but no action was taken. On 8/28/2008, the address for 1576001665 was erroneously changed in STARS2 to the new location. The error was not discovered and corrected until April-May 2014, at which time 1576001665 was permanently shutdown, new Facility ID 1576175017 was created, and the company was requested to submit an initial installation PTIO application.

1. The coating spray process

Maximum potential gallons per year were estimated by scaling-up the total amount used in 2013 on a 40 hour/week schedule (which equals roughly 2000 hours per year) to a full 168 hour/week schedule (8760 hours per year):



$$\frac{419 \text{ gal}}{2000 \text{ hr}} = \frac{x \text{ gal}}{8760 \text{ hr}} \rightarrow x = 1835 \text{ gal}$$

As a conservative measure, an engineering estimate was made that the company might be able to make process improvements that would double the productivity of the coating operation. This would then double the volume of coating materials they could use:

$$2 \times 1835 \text{ gal/yr} = 3670 \text{ gal/yr}_{(\text{CONSERVATIVELY HIGH ESTIMATE})}$$

Next, a volume-weighted average was used to calculate OC and VOC concentrations based on the top ten coatings used in 2013, which together comprised 95.6% of the total volume of coatings. This approach was taken because the nature of the business at this facility inherently requires a variety of different coating types to be used over the course of a year (e.g., primers, solid-color topcoats, stains, and clear finishes). The results were as follows:

Volume-weighted average OC = 5.19lb_{OC}/gal
 Volume-weighted average VOC = 4.85lb_{VOC}/gal

Annual PTE for the coating process was then calculated as follows:

OC_{COATING}: (3670 gal/yr) x (5.19lb_{OC}/gal) ÷ (2000 lb/ton) = 9.52ton_{OC}/yr
 VOC_{COATING}: (3670 gal/yr)x (4.85lb_{VOC}/gal) ÷ (2000 lb/ton) = 8.90ton_{VOC}/yr

2. Cleaning material usage:

DT-5 Lacquer Thinner is used for cleaning spray guns and associated equipment. As provided by the permittee in the permit application, the maximum usage rate is 5.0 gal/week (gross) based on a 40 hour/week schedule. Further, the permittee estimated that 90% of the volume is recovered and disposed as liquid waste, while the remaining 10% evaporates. So the estimated net cleaning material usage is 5.0 gal/week x (1 – 0.90) = 0.5 gal/week (still based on 40 hours per week).

Maximum potential net gallons per week were estimated by scaling-up the total net amount used in 40 hours to a full 168 hours:

$$\frac{0.5 \text{ gal}}{40 \text{ hr}} = \frac{y \text{ gal}}{168 \text{ hr}} \rightarrow y = 2.1 \text{ gal}$$

The maximum net amount per year was then calculated as 2.1 gal/week x 52 wk/yr = 109.2 gal/yr.

For the coating spray process (see above), as a conservative measure, an engineering estimate was made that the company might be able to make process improvements that would double the productivity of the coating operation. This would then double the volume of coating materials they could use. Along with this estimate, then, the maximum net amount of cleaning material was doubled:



$$2 \times 109.2 \text{ gal/yr} = 218.4 \text{ gal/yr}_{(\text{CONSERVATIVELY HIGH ESTIMATE})}$$

DT-5 Lacquer Thinner:

OC content: 6.72 lb_{OC}/gal

VOC content: 5.71 lb_{VOC}/gal

$$\text{OC}_{\text{CLEANING}}: (218.4 \text{ gal/yr}) \times (6.72 \text{ lb}_{\text{OC}}/\text{gal}) \div (2000 \text{ lb/ton}) = 0.73 \text{ ton}_{\text{OC}}/\text{yr}$$

$$\text{VOC}_{\text{CLEANING}}: (218.4 \text{ gal/yr}) \times (5.71 \text{ lb}_{\text{VOC}}/\text{gal}) \div (2000 \text{ lb/ton}) = 0.62 \text{ ton}_{\text{VOC}}/\text{yr}$$

3. The coating spray process and cleaning material usage combined:

$$\text{Total OC} = (9.52 \text{ ton}_{\text{OC}}/\text{yr})_{\text{COATING}} + (0.73 \text{ ton}_{\text{OC}}/\text{yr})_{\text{CLEANING}} = 10.25 \text{ ton}_{\text{OC}}/\text{yr}$$

$$\text{Total VOC} = (8.90 \text{ ton}_{\text{VOC}}/\text{yr})_{\text{COATING}} + (0.62 \text{ ton}_{\text{VOC}}/\text{yr})_{\text{CLEANING}} = 9.52 \text{ ton}_{\text{VOC}}/\text{yr}$$

g) Miscellaneous Requirements

Values for material properties required in g)(1) and g)(2) 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 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 organic compound(OC) content of any liquid material, in pounds of OC per gallon.

$$\text{OC} = (D)(W_{\text{OC}}) \text{ See Notes 1. and 2. below}$$

where:

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

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

$$= W_{\text{VM}} - W_{\text{W}}$$

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.

Notes for g)(1):

1. For coatings, if the "as-applied" value is required for the OC content, 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, and for all two-part coatings (which may also include thinners, reducers or other additives), the "as-applied" value for the OC content must be calculated as a volume-weighted average for the coating mixture, in which case the applicable parameter shall be identified as OC_{MIX} . The following formula shall be used to calculate OC_{MIX} :

$$OC_{MIX} = \sum_{i=1}^n (V_i) (OC_i)$$

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.

Individual parameter values must be calculated or obtained for each material "i" in the coating mixture.

- (2) The following method shall be used to calculate the actual VOC content of any liquid material, in pounds of VOC per gallon. This value is defined as $C_{VOC,1}$ in OAC rule 3745-21-10(B). Where appropriate, references to the word "coating" in OAC rule 3745-21-10(B) have been changed to "material" in the text below in order to make clear that this method is applicable to the general case of any liquid material.

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

where:

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

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} = weight fraction of exempt solvents in the material, in pounds of exempt solvents per pound of material. (For a definition of "exempt solvents," see Section B. of this permit, Facility-Wide Terms and Conditions.)

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, 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.

Individual parameter values must be calculated or obtained for each material "i" in the coating mixture.