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

6/2/2014

Certified Mail

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

Thomas Harsacky
idX Corporation
2875 Needmore Road
Dayton, OH 45414

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0857045092
Permit Number: P0116806
Permit Type: Initial Installation
County: Montgomery

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

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

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: RAPCA

FINAL

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

Facility ID:	0857045092
Permit Number:	P0116806
Permit Type:	Initial Installation
Issued:	6/2/2014
Effective:	6/2/2014
Expiration:	6/2/2019

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

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Authorization

Facility ID:	0857045092
Application Number(s):	A0050724
Permit Number:	P0116806
Permit Description:	Initial installation PTIO for a wood furniture coating lines, adhesive use, cleanup solvent use and woodworking operations.
Permit Type:	Initial Installation
Permit Fee:	$1,400.00
Issue Date:	6/2/2014
Effective Date:	6/2/2014
Expiration Date:	6/2/2019

Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

idX Corporation
2875 Needmore Road
Dayton, OH 45414

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0116806
Permit Description: Initial installation PTIO for a wood furniture coating lines, adhesive use, cleanup solvent use and woodworking operations.

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

Emissions Unit ID:	**K005**
Company Equipment ID:	Adhesive pots
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P001**
Company Equipment ID:	Cleanup
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	Woodworking
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: coating lines

Emissions Unit ID:	**K001**
Company Equipment ID:	Main spray booth
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K002**
Company Equipment ID:	Flat line
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K003**
Company Equipment ID:	Trim Line
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**K004**
Company Equipment ID:	New Finish Line
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

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 beingpermanently shut down without first applying for and obtaining a permit pursuantto 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.

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) None.

2. The combined Volatile Organic Compound (VOC) emissions from all of the emissions units in operation at this facility shall not exceed 25.0 tons on a rolling 12-month basis.

   To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month	laximum Allowable Cumulative VOC Emissions (tons)
1	8.3
1-2	16.6
2-3	25.0
3-4	25.0
4-5	25.0
5-6	25.0
6-7	25.0
7-8	25.0
8-9	25.0
9-10	25.0
10-11	25.0
11-12	25.0

3. The permittee shall collect and record the following information each month for each emissions unit:

   a) The VOC emission rate for each emissions unit, in tons, (calculated according to the applicable monitoring and record keeping requirements in this PTIO for each emissions unit);

b) The combined VOC emission rate for all emissions units, in tons, (the sum of the monthly VOC emissions rates 3.a) for each emissions unit);

c) The rolling 12-month VOC emissions rate for the facility, in tons, (the sum of the VOC emissions calculated according to 3.b) for the previous 12-months).

4. The facility wide emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons on rolling 12-month basis for any individual HAP and 24.9 tons on a rolling 12-month basis for the combination of all HAPs.

To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month	Maximum Allowable Cumulative Individual HAP Emissions (tons)	Maximum Allowable Cumulative Combined HAP Emissions (tons)
1	3.3	8.3
1-2	6.6	16.6
2-3	9.9	24.9
3-4	9.9	24.9
4-5	9.9	24.9
5-6	9.9	24.9
6-7	9.9	24.9
7-8	9.9	24.9
8-9	9.9	24.9
9-10	9.9	24.9
10-11	9.9	24.9
11-12	9.9	24.9

After the first 12 calendar months following the issuance of this permit, compliance with the rolling 12-month HAP emissions limitations shall be based upon the sum of the HAP emissions rates for the previous 12-months.

5. The permittee shall collect and record the following information each month for the entire facility:

a) The name and identification number of each coating and cleanup material employed.

b) The individual hazardous air pollutant (HAP)* content for each HAP of each coating and cleanup material, in pounds of individual HAP per gallon, as applied.

c) The total combined HAPs content of each coating and cleanup material, in pounds of combined HAPs per gallon, as applied [the sum of all the individual HAP contents from B.5.b)].

d) The volume, in gallons, of each coating and cleanup material employed.

e) The total individual HAP emissions for each HAP from all coating materials and cleanup materials employed, in tons per month [for each HAP, the sum of B.5.b) times B.5.d) for each coating and cleanup material].

f) The total combined HAPs emissions from all coating materials and cleanup materials employed, in tons per month [the sum of B.5.c) times B.5.d) for each coating and cleanup material].

g) The total individual HAP emissions for each HAP from all coating materials and cleanup materials employed, in tons, for the previous 12-months [the sum of the values calculated according to 5.e) for the previous 12-months]. Also, during the first 12 calendar months of following the issuance of this permit, the permittee shall record the cumulative emissions rate for each HAP for each calendar month.

h) The total combined HAPs emissions from all coating materials and cleanup materials employed, in tons, for the previous 12-months [the sum of the values calculated according to 5.f) for the previous 12-months]. Also, during the first 12 calendar months of following the issuance of this permit, the permittee shall record the cumulative emissions rate for all HAPs combined for each calendar month.

* A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA District Office or local air agency contact.

6. The permittee shall submit quarterly deviation (excursion) reports that identify all deviations (excursions) of the following emission limitations, that restrict the potential to emit of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

a) An identification of each month during which the rolling, 12-month VOC emissions rate exceeds 25.0 tons and the actual rolling, 12-month VOC emissions rate for that month.

b) all exceedances of the rolling, 12-month emission limitation for each individual HAP and, for the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels,

c) all exceedances of the rolling, 12-month emission limitation for combined HAP and, for the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels;

d) the probable cause of each deviation (excursion);

e) any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

f) the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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

7. The permittee shall also submit annual reports that specify the total individual HAP and combined HAP emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

8. Compliance with the emission limitations in B.2 shall be determined in accordance with the following methods:

   a) <u>Emissions Limitation:</u>

      The combined VOC emissions from all of the emissions units in operation at this facility shall not exceed 25.0 tons on a rolling 12-month basis.

      <u>Applicable Compliance Method:</u>

      Compliance shall be based on the record keeping specified in B.3 for VOC.

   b) <u>Emissions Limitation:</u>

      Individual HAP emissions from this facility shall not exceed 9.9 tons per year on a rolling 12-month basis.

      <u>Applicable Compliance Method:</u>

      Compliance shall be based on the record keeping specified in B.5 for each individual HAP.

c) Emissions Limitation:

Combined HAP emissions from this facility shall not exceed 24.9 tons on a rolling, 12-month basis.

Applicable Compliance Method:

Compliance shall be based on the record keeping specified in B.5 for combined HAP.

C. Emissions Unit Terms and Conditions

1. K005, Adhesive pots

Operations, Property and/or Equipment Description:

Wood furniture coating line - Adhesive application

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.

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

a. b)(1)c.

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) ORC 3704.03(T)	The volatile organic compounds (VOC) emissions from adhesive material use shall not exceed 1.5 tons per month as a rolling 12-month average. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) Synthetic minor to avoid Title V and MACT	See b)(2)b. and Sections B.2. through B.8
c.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(d)	See d)(3) through b)(6) and e)(3).

(2) Additional Terms and Conditions

a. This emissions unit is located in Montgomery County and is not subject to emissions limitations of OAC rule 3745-21-15. However, in accordance with Ohio EPA Best Available Technology (BAT) requirements for permits issued on or after February 7, 2014 this emissions unit must comply with the Reasonably

Achievable Control Technology (RACT) requirements of OAC rule 3745-21-15 as BAT.

b. As identified in OAC rule 3745-21-15(A)(2)(a), any facility that has a potential to emit for VOC of less than 25.0 tons per year for all wood furniture manufacturing operations combined is not subject to the emissions limitations of the rule. In order to avoid the emissions limitations of OAC rule 3745-21-15 and Title V major source operating permit requirements the permittee will limit the VOC emissions from all emissions units in operation at the facility to less than 25.0 tons on a rolling 12-month basis. The monitoring, record keeping and reporting requirements necessary to comply with this emissions limitation are identified in Section B.2., B.3., B.6. and B.8.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. The identification of each adhesive material applied;

b. The volume, in gallons, of each adhesive material applied;

c. The VOC content of each adhesive material employed, in pounds per gallon;

d. The VOC emissions from each adhesive material employed, in pounds, (the product of d)(1)b. multiplied by d)(1)c. for each adhesive employed);

e. The combined VOC emissions from all adhesives employed, in tons, (the sum of the VOC emissions calculated according to d)(1)d. for all adhesives employed divided by 2,000 pounds per ton);

f. The average VOC emissions from adhesive use as a rolling 12-month average, in tons per month (the combined VOC emissions calculated according to d)(1)e. for the previous 12- months divided by 12).

(2) The permittee shall collect and record the following information for the purpose of determining annual organic compound (OC) emissions as required for the Synthetic Minor Title V Fee Emissions Report (FER) on an annual basis.

a. The identification of each adhesive material employed;

b. The volume, in gallons, of each adhesive material employed;

c. the OC content of each adhesive material employed, in pounds per gallon;

d. the total OC emissions from all adhesive material employed, (the sum of the products of d)(2)b times d)(2)c for each individual adhesive employed);

e. The annual OC emission rate for all adhesive material employed, in tons per year (the sum of the OC emissions calculated in d)(2)d for each calendar year).

(3) The PTIO application for this emissions unit, K005, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

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

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

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

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

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

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

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

Toxic Contaminant: hexane.
TLV (mg/m^3): 176

Maximum Hourly Emission Rate (pounds/hour): 5.0
Predicted 1-Hour Maximum Ground-Level Concentration (μg/m^3): 1,132
MAGLC (μg/m^3): 5,587

Toxic Contaminant: toluene.
TLV (mg/m^3): 75.37
Maximum Hourly Emission Rate (lbs/hr): 1.2
Predicted 1-Hour Maximum Ground-Level Concentration (μg/m^3): 283
MAGLC (μg/m^3): 2,393

The permittee, has demonstrated that emissions of hexane, from emissions unit K005, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

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

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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

(2) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

(3) The permittee shall submit annual reports which specify the following information for this emissions unit for each calendar year:

a. the total VOC emissions, in tons; and

b. the total OC emissions, in tons.

The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations specified b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation -

The VOC emissions from adhesive material use shall not exceed 1.5 tons per month as a rolling 12-month average.

Applicable Compliance Method –

Compliance shall be determined in accordance with the record keeping requirements of d)(1).

g) Miscellaneous Requirements

(1) None.

2. P001, Cleanup

Operations, Property and/or Equipment Description:

Facility wide cleanup solvent use

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.

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

a. b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) ORC 3704.03(T)	The volatile organic compounds (VOC) emissions from cleanup material use shall not exceed 2.08 tons per month as a rolling 12-month average. See b)(2)a. through b)(2)c.
b.	OAC rule 3745-31-05(D) Synthetic minor to avoid Title V and MACT	See b)(2)c. and Sections B.2. through B.8
c.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(d)	See d)(3) through b)(6) and e)(3).

(2) Additional Terms and Conditions

a. This emissions limitation is based on the assumption that all of the cleanup materials employed in this emissions unit are volatile organic compounds (VOC).

b. This emissions unit is located in Montgomery County and is not subject to emissions limitations of OAC rule 3745-21-15. However, in accordance with Ohio EPA Best Available Technology (BAT) requirements for permits issued on or after February 7, 2014 this emissions unit must comply with the Reasonably Achievable Control Technology (RACT) requirements of OAC rule 3745-21-15 as BAT.

c. As identified in OAC rule 3745-21-15(A)(2)(a), any facility that has a potential to emit for VOC of less than 25.0 tons per year for all wood furniture manufacturing operations combined is not subject to the emissions limitations of the rule. In order to avoid the emissions limitations of OAC rule 3745-21-15 and Title V major source operating permit requirements the permittee the will limit the VOC emissions form all emissions units in operation at the facility to less than 25.0 tons on a rolling 12-month basis. The monitoring, record keeping and reporting requirements necessary to comply with this emissions limitation are identified in Section B.2., B.3., B.6. and B.8.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. The identification of each cleanup material employed;

b. The volume, in gallons, of each cleanup material employed;

c. The VOC content of each cleanup material employed, in pounds per gallon;

d. The total weight of VOC, in pounds, from all cleanup materials employed (the sum of d)(1)b multiplied d)(1)c for all cleanup materials employed);

e. The volume, in gallons, of cleanup material recovered for disposal as liquid waste;

f. The total weight of VOC, in pounds, from all cleanup materials disposed of as liquid waste (the sum of d)(1)e multiplied d)(1)c for all cleanup materials disposed of as liquid waste);

g. The combined VOC emissions from all cleanup materials, in tons (the combined weight of all cleanup material employed from d)(1)d minus the combined weight of all cleanup material disposed of as liquid waste from d)(1)f. divided by 2,000 pounds per ton);

h. The average VOC emissions from all cleanup materials employed as a rolling 12-month average, in tons per month (the combined VOC emissions calculated according to d)(1)g. divided by 12).

(2) The permittee shall collect and record the following information for the purpose of determining annual organic compound (OC) emissions as required for the Synthetic Minor Title V Fee Emissions Report (FER) on annual basis.

a. The identification of each cleanup material employed;

b. The volume, in gallons, of each cleanup material employed;

c. the OC content of each cleanup material employed, in pounds per gallon;

d. the total OC emissions from all cleanup material employed, (the sum of the products of d)(2)b times d)(2)c for each individual adhesive employed);

e. The annual OC emission rate for all organic compound cleanup materials, in tons per year (the sum of the OC emissions calculated in d)(2)d for each calendar year).

(3) The PTIO application for this emissions unit, P001, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:

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

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

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

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

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

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

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

Toxic Contaminant: Cumene
TLV (mg/m^3): 246
Maximum Hourly Emission Rate (lbs/hr): 1.44
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 327
MAGLC ($\mu g/m^3$): 7,810

Toxic Contaminant: xylene.
TLV (mg/m^3): 434.19
Maximum Hourly Emission Rate (lbs/hr): 0.7
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 155
MAGLC ($\mu g/m^3$): 13,784

The permittee, has demonstrated that emissions of cumene, from emissions unit P001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

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

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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

(2) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground−level concentration, in the annual PER. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

(3) The permittee shall submit annual reports which specify the following information for this emissions unit for each calendar year:

a. the total VOC emissions, in tons; and

b. the total OC emissions, in tons.

The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations specified in b) shall be determined in accordance with the following methods:

a. <u>Emissions Limitation</u> –

The VOC emissions from cleanup material use shall not exceed 2.08 tons per month as a rolling 12-month average.

<u>Applicable Compliance Method</u> –

Compliance shall be determined in accordance with the record keeping requirements of d)(1).

g) Miscellaneous Requirements

(1) None.

3. P002, Woodworking

Operations, Property and/or Equipment Description:

Woodworking operations (sawing, sanding, planning, lathe operations, drilling and chipping) with baghouse

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) ORC 3704.03(T) As effective November 30, 2001	The particulate emissions from this emissions unit shall not exceed 0.002 grain per dry standard cubic foot of exhaust from the baghouse. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) As effective December 1, 2006	See b)(2)b.
c.	OAC rule 3745-17-11(B)	The particulate emissions limitations established according to this rule are less stringent than the emissions limitations established according to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

b. This PTIO for this air contaminant source takes into account the voluntary installation of a baghouse that will limit particulate emissions to less than 0.002 grain per dry standard cubic foot of exhaust.

This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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

considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

f) Testing Requirements

(1) Compliance with the Emissions Limitations specified in section b) shall be determined in accordance with the following methods:

a. Emissions Limitation –

The particulate emissions from this emissions unit shall not exceed 0.002 grain per dry standard cubic foot of exhaust from the baghouse.

Applicable Compliance Method –

The baghouse installed on this emissions unit is a Donaldson Torit Model 484RFW12 equipped with 484 Dura-life filters. The baghouse shall be operated in accordance with the manufacturers installation, operation and maintenance manuals and accepted industrial ventilation practices.

If requested, compliance shall be based on emissions testing conducted according to the procedures identified in U.S. EPA Reference Methods 1 through 5 of 40 CFR Part 60, Appendix A and OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group -coating lines: K001,K002,K003,K004,

EU ID	Operations, Property and/or Equipment Description
K001	Wood furniture coating line with dry filtration - Main line
K002	Wood furniture coating line with dry filtration - Flat line
K003	Wood Furniture Coating Line with dry filtration - Trim Line
K004	Wood furniture coating line with dry filtration and gas fired drying oven - New Finish Line

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.

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

a. b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) ORC 3704.03(T)	The volatile organic compounds (VOC) emissions from coating application in each emissions unit shall not exceed 2.08 tons per month as a rolling 12-month average. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) Synthetic minor to avoid Title V and MACT	See b)(2)b. and Sections B.2. through B.8
c.	OAC rule 3745-114-01 ORC 3704.03(F)(4)(c) and (d)	See b)(2)c., d)(3) through b)(6), e)(2)a. and e)(2)b.
d.	OAC rule 3745-17-11(C)	See c)(1), d)(7) through d)(11) and e)(2)c.

(2) Additional Terms and Conditions

a. This emissions unit is located in Montgomery County and is not subject to emissions limitations of OAC rule 3745-21-15. However, in accordance with Ohio EPA Best Available Technology (BAT) requirements for permits issued on or after February 7, 2014 this emissions unit must comply with the Reasonably Achievable Control Technology (RACT) requirements of OAC rule 3745-21-15 as BAT.

b. As identified in OAC rule 3745-21-15(A)(2)(a), any facility that has a potential to emit for VOC of less than 25.0 tons per year for all wood furniture manufacturing operations combined is not subject to the emissions limitations of the rule. In order to avoid the emissions limitations of OAC rule 3745-21-15 and Title V major source operating permit requirements the permittee the will limit the VOC emissions form all emissions units in operation at the facility to less than 25.0 tons on a rolling 12-month basis. The monitoring, record keeping and reporting requirements necessary to comply with this emissions limitation are identified in Section B.2., B.3., B.6. and B.8.

c. In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for:

i. Combined toluene emissions from these emissions units, shall not exceed 79.2 pounds per day.

ii. Combined xylene (all isomers) emissions from these emissions units, shall not exceed 420 pounds per day.

This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule (12 hours of coating per day) submitted in the permit application, by the emission rate modeled (toluene - 6.60 pounds per hour and xylene – 35.0 pounds per hour) to determine the ground level concentration.

c) Operational Restrictions

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

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for each emissions unit:

a. The identification of each coating material applied;

b. The volume, in gallons, of each coating material applied;

c. The VOC content of each coating material employed, in pounds per gallon;

d. The VOC emissions from each coating material employed, in pounds (the product of d)(1)b multiplied by d)(1)c. for each coating employed);

e. The combined VOC emissions from all coatings employed, in tons, (the sum of the VOC emissions calculated according to d)(1)d. for all coating employed divided by 2,000 pounds per ton);

f. The average VOC emissions from coatings use as a rolling 12-month average, in tons per month (the combined VOC emissions calculated according to d)(1)e. for the previous 12-months divided by 12).

(2) The permittee shall collect and record the following information for the purpose of determining annual organic compound (OC) emissions for each emissions unit as required for the Synthetic Minor Title V Fee Emissions Report (FER) on annual basis.

a. The identification of each coating material employed;

b. The volume, in gallons, of each coating material employed;

c. the OC content of each coating material employed, in pounds per gallon;

d. the total OC emissions from all coating material employed, (the sum of the products of d)(2)b times d)(2)c for each individual adhesive employed);

e. The annual OC emission rate for all coating materials applied, in tons per year (the sum of the OC emissions calculated in d)(2)d for each calendar year).

(3) The PTIO application for these emissions units, K001, K002, K003 and K004, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been

documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

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

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

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

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

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

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

Toxic Contaminant: toluene.
TLV (mg/m^3): 75.37
Maximum Hourly Emission Rate (lbs/hr): 6.6
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m^3): 2,090
MAGLC (µg/m^3): 2,393

Toxic Contaminant: xylene (all isomers).
TLV (mg/m^3): 434
Maximum Hourly Emission Rate (lbs/hr): 35.0
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m^3): 10,971
MAGLC (µg/m^3): 13,784

Toxic Contaminant: ethylbenzene.
TLV (mg/m^3): 86.85
Maximum Hourly Emission Rate (lbs/hr): 6.6
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m^3): 2,090
MAGLC (µg/m^3): 2,757

Toxic Contaminant: methyl ethyl ketone.
TLV (mg/m^3): 590
Maximum Hourly Emission Rate (lbs/hr): 31.6

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m^3): 9,927
MAGLC (µg/m^3): 18,370

The permittee, having demonstrated that emissions of toluene and xylene from emissions units K001, K002, K003 and K004 is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the MAGLC, shall not operate the emissions units at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and 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).

The permittee, has demonstrated that emissions of ethylbenzene and methyl ethyl ketone, from emissions units K001, K002, K003 and K004, are calculated to be less than eighty per cent of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

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

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

(7) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(8) The permittee shall conduct periodic inspections of the dry particulate filter 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 or operator. 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 and it shall be made available to the Ohio EPA upon request.

(9) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

(10) The permittee shall document each inspection (periodic and annual) of the 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.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

(11) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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

(2) The permittee shall include in the annual PER:

a. anyexceedance of the daily limitation on toxic air emissions as established by the Director, in order to maintain any toxic air contaminant below its MAGLC.

b. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions units, or the exhaust stack have been made, then the report shall include a statement to this effect.

c. any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions units were in operation;

(3) The permittee shall submit annual reports which specify the following information for each emissions unit for each calendar year:

a. the total VOC emissions, in tons; and

b. the total OC emissions, in tons.

The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations specified in b) shall be determined in accordance with the following methods:

a. <u>Emissions Limitation</u> –

The VOC emissions from coating application in each emissions unit shall not exceed 2.08 tons per month as a rolling 12-month average.

<u>Applicable Compliance Method</u> –

Compliance shall be determined in accordance with the record keeping requirements of d)(1).

g) Miscellaneous Requirements

(1) None.