



State of Ohio Environmental Protection Agency

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50 W. Town St., Suite 700
Columbus, Ohio 43215

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P.O. Box 1049
Columbus, OH 43216-1049

2/10/2009

Certified Mail

Jason Hale
Pella Entry Systems
7100 Dixie Highway
Fairfield, OH 45014

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1409030092
Permit Number: P0104013
Permit Type: Initial Installation
County: Butler

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

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. If you have any questions regarding this permit, please contact the Hamilton County Dept. of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Hamilton County Dept. of Environmental Services

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install
for
Pella Entry Systems**

Facility ID: 1409030092
Permit Number: P0104013
Permit Type: Initial Installation
Issued: 2/10/2009
Effective: 2/10/2009



Air Pollution Permit-to-Install
for
Pella Entry Systems

Table of Contents

- Authorization 1
- A. Standard Terms and Conditions 3
 - 1. Federally Enforceable Standard Terms and Conditions 4
 - 2. Severability Clause 4
 - 3. General Requirements 4
 - 4. Monitoring and Related Record Keeping and Reporting Requirements 5
 - 5. Scheduled Maintenance/Malfunction Reporting 6
 - 6. Compliance Requirements 6
 - 7. Best Available Technology 7
 - 8. Air Pollution Nuisance 7
 - 9. Reporting Requirements 7
 - 10. Applicability 8
 - 11. Construction of New Sources(s) and Authorization to Install 8
 - 12. Permit-To-Operate Application 9
 - 13. Construction Compliance Certification 9
 - 14. Public Disclosure 9
 - 15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 9
 - 16. Fees 9
 - 17. Permit Transfers 10
 - 18. Risk Management Plans 10
 - 19. Title IV Provisions 10
- B. Facility-Wide Terms and Conditions 11
- C. Emissions Unit Terms and Conditions 14
 - 1. R011, Display and Factory Finishing Area 15
 - 2. R012, Display and Factory Finishing Area 24
 - 3. R013, Display and Factory Finishing Area 33
 - 4. R017, Display and Factory Finishing Area 42
 - 5. R018, Display and Factory Finishing Area 51
 - 6. R019, Display and Factory Finishing Area 60



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0104013
Facility ID: 1409030092
Effective Date: 2/10/2009

Authorization

Facility ID: 1409030092
Facility Description: Steel and fiberglass door manufacturer
Application Number(s): A0036063
Permit Number: P0104013
Permit Description: Permit application is requesting a modification to existing permits for R011-R013 and R017-R019 to include new finishing area booths in group VOC emissions limit.
Permit Type: Initial Installation
Permit Fee: \$1,200.00
Issue Date: 2/10/2009
Effective Date: 2/10/2009

This document constitutes issuance to:

Pella Entry Systems
7100 Dixie Highway
Fairfield, OH 45014

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104013
 Permit Description: Permit application is requesting a modification to existing permits for R011-R013 and R017-R019 to include new finishing area booths in group VOC emissions limit.

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

Emissions Unit ID:	R011
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R012
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R013
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R017
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R018
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R019
Company Equipment ID:	Display and Factory Finishing Area
Superseded Permit Number:	14-05768
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Hamilton County Dept. of Environmental Services.



(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Hamilton County Dept. of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Hamilton County Dept. of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Hamilton County Dept. of Environmental Services in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:



- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Hamilton County Dept. of Environmental Services concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Hamilton County Dept. of Environmental Services.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Environmental Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted



(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Hamilton County Dept. of Environmental Services must be notified in writing of any transfer of this permit.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.

2. The actual emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units K002 (Ransburg Paint Line 1), K003 (Door Line #2), K004 (Door Line #3), K006 (Side Light Line), K008 (Paint booth for wood parts), K009 (Adhesive spray booth), K010 (Adhesive spray booth), K011 (Milltreat Operation Spray Booth), P008 (Polystyrene Foam Embosser #1), P013 (Polystyrene Foam Embosser #2), P015 (Woodworking equipment), R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), R027 (Finishing Area: Booth 16), any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units pursuant to OAC rule 3745-31-03, or future constructed emissions units, combined, shall not exceed 9.9 tons per year (TPY) for any single HAP, as a rolling, 12-month summation and 24.9 TPY for any combination of HAPs, as a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

3. The permittee shall collect and record the following information each month for the emissions units identified in 2. above:
 - a) The name and identification number of each coating or material employed.
 - b) The individual HAP* content for each HAP of each coating or material, in pounds of individual HAP per gallon of coating or material, as applied.
 - c) The total combined HAP content of each coating or material, in pounds of combined HAPs per gallon of coating or material, as applied [sum all the individual HAP contents from b)].
 - d) The number of gallons of each coating or material employed.
 - e) The name and identification number of each cleanup material employed.
 - f) The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied.
 - g) The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from f)].
 - h) The number of gallons of each cleanup material employed.
 - i) The total individual HAP emissions from all coatings, materials, and cleanup materials employed, in pounds or tons [for each HAP, the sum of b) times d) for all coatings or materials plus the sum of f) times h) for all cleanup materials, and divided by 2,000 pounds per ton, if the units are in tons].



- j) The total combined HAP emissions from all coatings, materials, and cleanup materials employed, in pounds or tons [the sum of c) times d) for all coatings or materials plus the sum of g) times h) for all cleanup materials, and divided by 2,000 pounds per tons, if the units are in tons].
- k) The updated rolling, 12-month summation of emissions for each individual HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
- l) The updated rolling, 12-month summation of emissions for the total combined HAPs, in tons. This shall include the information for the current month and the preceding eleven calendar months.

*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

- 4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in 2. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

5. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs, based on a rolling 12-month summation for the emissions units listed in 2.

Applicable Compliance Method:

Compliance with the HAP emission limitations shall be demonstrated by the record keeping requirements specified in 3.



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C. Emissions Unit Terms and Conditions



1. R011, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 1

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer=s recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons]; and
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and

- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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 A 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) A 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) A 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., 24 hours per day and 7 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 A worst case toxic contaminant(s):

Toxic Contaminant: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute[®], ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
- (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$VOC = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content})$.

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$VOC = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content})$.

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.



2. R012, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 2

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer=s recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons];
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and



- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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., 24 hours per day and 7 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: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute[®], ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
- (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content}).$$

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content}).$$

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.



3. R013, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 3

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons];
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and



- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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., 24 hours per day and 7 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: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute, ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
- (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content}).$$

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content}).$$

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.



4. R017, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 6

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer=s recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons];
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and



- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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., 24 hours per day and 7 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: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute[®], ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
- (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content}).$$

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content}).$$

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.



5. R018, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 7

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05 (D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons];
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and



- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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 A 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) A 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) A 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., 24 hours per day and 7 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 A worst case toxic contaminant(s):

Toxic Contaminant: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute[®], ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
 - (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content}).$$

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$$\text{VOC} = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content}).$$

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.



6. R019, Display and Factory Finishing Area

Operations, Property and/or Equipment Description:

Finishing Area: Booth 8

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) d)(7), d)(8), d)(9), and d)(10).
- b) Applicable Emission limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emission limitations and/or control measures. 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 Emission limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 11.5 pounds per hour when coating non-metal parts*, excluding cleanup.</p> <p>VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts*, excluding cleanup.</p> <p>*These emission limitations are based upon the emissions unit's potential to emit. Therefore no records are required to demonstrate compliance with these limitations.</p> <p>See b)(2)a. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(c), and 3745-31-05(D).</p>
b.	OAC rule 3745-17-11(C)	See b)(2)f.
c.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V and Non-Attainment New Source Review	See Sections B.2., B.3., B.4., and B.5., and b)(2)a., c)(1), d)(1), e)(1), and f)(1)c.



(2) Additional Terms and Conditions

- a. The combined annual volatile organic compound (VOC) emissions from emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation. Note that this is currently a major non-attainment stationary air contaminant source for ozone and that the net increase from both this permitting action and P0104124 over baseline emission levels is less than 40 tons per year.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- c. The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.
- d. The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- e. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.
- f. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units R011 (Finishing Area: Booth 1), R012 (Finishing Area: Booth 2), R013 (Finishing Area: Booth 3), R017 (Finishing Area: Booth 6), R018 (Finishing Area: Booth 7), R019 (Finishing Area: Booth 8), R020 (Finishing Area: Booth 9), R021 (Finishing Area: Booth 10), R022 (Finishing Area: Booth 11), R023 (Finishing Area: Booth 12), R024 (Finishing Area: Booth 13), R025 (Finishing Area: Booth 14), R026 (Finishing Area: Booth 15), and R027 (Finishing Area: Booth 16) shall not exceed 66.0 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the



VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate. The VOC input of any cleanup material collected and disposed of as waste may be subtracted from the total VOC input.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- (2) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
- (3) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
 - a. the name and identification of each coating and cleanup material employed;
 - b. The type of material coated (metal or non-metal) by each coating and cleanup material;
 - c. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied;
 - d. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
 - e. the number of gallons of each coating employed;
 - f. the number of gallons of each cleanup material employed;
 - g. the monthly volume-weighted average VOC content of all coatings employed to coat non-metal doors [the total pounds of VOC from all coatings used on non-metal doors per month divided by the total gallons of coatings, excluding water and exempt solvents, used on non-metal doors per month];
 - h. the total VOC input/emissions in pounds or tons [summation of {d)(1)c. x d)(1)e.} for all coatings plus {d)(1)d. x d)(1)f.} for all cleanup materials, and divided by 2,000 pounds per ton, if the units are to be in tons];
 - i. the updated rolling, 12-month summation of the total VOC input/emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months; and



- j. the VOC content of each coating, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
- (2) 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.
 - (3) 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.
 - (4) 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.
 - (5) 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 of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was 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.
- (7) The permit-to-install (PTI) application for these emissions units (R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to these emissions units 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 A 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) A 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) A 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., 24 hours per day and 7 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 A worst case toxic contaminant(s):

Toxic Contaminant: Ethyl benzene

TLV (ug/m3): 434,190

Maximum Hourly Emission Rate (lbs/hr): 0.29

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.66

MAGLC (ug/m3): 10,337.9

The permittee, has demonstrated that emissions of ethyl benzene, from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022,



R023, R024, R025, R026, and R027, are 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 AToxic Air Contaminant Statute, ORC 3704.03(F).

- (8) 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 AToxic 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 AToxic 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 PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.
- (10) 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 AToxic 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 quarterly written reports to Hamilton County Department of Environmental Services that identify the amount of VOC input per month and the updated rolling, 12-month summation of the amount of VOC input for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, combined. The reports shall also include the monthly VOC emissions rate and the updated rolling, 12-month VOC emissions rate. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter (October through December, January through March, April through June, and July through September, respectively).
 - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of coating(s) with VOC contents exceeding the limitations specified in b)(2)d., as applicable. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
 - (3) The permittee shall submit annual reports which specify the total VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027, and the facility-wide total individual HAP emissions and total combined HAP emissions for the previous calendar year. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year.
 - (4) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service (normal operation) when the emissions unit was in operation. If there were no deviations from the requirements of this permit during the calendar quarter, the report shall so state that no deviations occurred during the reporting period. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



- (5) 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 quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 11.5 pounds per hour when coating non-metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$VOC = (2.3 \text{ gallons per hour max paint flow rate}) \times (5.0 \text{ pounds VOC per gallon maximum coating VOC content})$.

b. Emission Limitation:

VOC emissions shall not exceed 8.1 pounds per hour when coating metal parts, excluding cleanup.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

$VOC = (2.3 \text{ gallons per hour max paint flow rate}) \times (3.5 \text{ pounds VOC per gallon maximum coating VOC content})$.

c. Emission Limitation:

The combined annual VOC emissions from emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 from the application of coatings and cleanup materials shall not exceed 66.0 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emission limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(1).



Actual VOC emissions for emissions units R011, R012, R013, R017, R018, R019, R020, R021, R022, R023, R024, R025, R026, and R027 shall be determined based on the following equation from the permittee-supplied information in PTI application A0036063 as submitted on October 27, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 lbs per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 lbs per ton)] for each coating and cleanup material, and for each emissions unit.

d. Emission Limitation:

The VOC content of each coating for non-metal parts employed in this emissions unit shall not exceed 5.0 pounds per gallon as applied excluding water and exempt solvents as a monthly volume-weighted average.

The VOC content of extreme performance coatings employed in this emissions unit, when coating metal parts, shall not exceed 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit to install supersede the terms and conditions of permit to install 14-05768, as issued on June 6, 2006, for emissions units R011, R012, R013, R017, R018, and R019.