



State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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Columbus, OH 43216-1049

12/18/2008

Gordon Keeler Jr.
FERRIOT, INC.
1000 ARLINGTON CIR
PO BOX 7670
AKRON, OH 44306-0670

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1677011093
Permit Number: P0103966
Permit Type: Renewal
County: Summit

Certified Mail

No	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 and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO 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

If you have any questions regarding this permit, please contact the Akron Regional Air Quality Management District. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: ARAQMD

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 and Operate
for
FERRIOT, INC.**

Facility ID: 1677011093
Permit Number: P0103966
Permit Type: Renewal
Issued: 12/18/2008
Effective: 12/18/2008
Expiration: 12/18/2013



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
for
FERRIOT, INC.

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Permit Number: P0103966
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Authorization

Facility ID: 1677011093
Application Number(s): A0036131
Permit Number: P0103966
Permit Description: renewal FEPTIO
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 12/18/2008
Effective Date: 12/18/2008
Expiration Date: 12/18/2013
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15
This document constitutes issuance to:

FERRIOT, INC.
1000 ARLINGTON CIRCLE
AKRON, OH 44306

of a Permit-to-Install and Operate 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:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0103966
Permit Description: renewal FEPTIO

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID: R010
Company Equipment ID: Booth #8
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Group Name: grp1

Emissions Unit ID:	R001
Company Equipment ID:	Booth #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R002
Company Equipment ID:	Booth #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R003
Company Equipment ID:	Booth #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R004
Company Equipment ID:	Booth #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R005
Company Equipment ID:	Booth #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R006
Company Equipment ID:	Booth #6
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	R007
Company Equipment ID:	Booth #7
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

Facility ID: 1677011093

Effective Date: 12/18/2008

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.



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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

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change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

Facility ID: 1677011093

Effective Date: 12/18/2008

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

Facility ID: 1677011093

Effective Date: 12/18/2008

C. Emissions Unit Terms and Conditions



1. R010, Booth #8

Operations, Property and/or Equipment Description:

spray booth for coating plastic parts

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 1.9 pounds per hour and 8.3 tons per year.
b.	OAC rule 3745-31-05(D)	Facility-wide OC emissions shall not exceed 99.0 tons per year, as a rolling 12-month summation. Facility-wide individual hazardous air pollutant (HAP) emissions shall not exceed 9.9 tons per year, as a rolling, 12-month summation. Facility combined HAP emissions shall not exceed 24.9 tons per year, as a rolling, 12-month summation.
c.	OAC rule 3745-21-07(G)	None, see c)(2).



(2) Additional Terms and Conditions

- a. The hourly OC emission limit established pursuant to OAC rule 3745-31-05 is based upon the potential to emit for this emissions unit, as determined from permit application data. Therefore, no record keeping, reporting, or emissions calculations are required to demonstrate compliance with this emission limit.
- b. On February 18, 2008 Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The new OAC rule 3745-21-07 does not establish any requirements for this emissions unit. The rule rescindment and new rule shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07, the requirement to comply with OAC rule 3745-21-07 (G) (2) still exists as part of the federally-approved SIP of Ohio. It should be noted that the requirements to comply with OAC rule 3745-21-07(G)(2) shall terminate on the date the U.S. EPA approves the rule rescindment and new rule as a revision of the Ohio SIP.

c) Operational Restrictions

- (1) The overspray control system shall be employed at all times the emissions unit is in operation.
- (2) The permittee shall not use any photochemically reactive materials in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the company identification of each liquid organic material, including cleanup material, employed in this emissions unit; and
 - b. whether or not each liquid organic material, including cleanup material, employed is a photochemically reactive material.
- (2) The permittee shall collect and record monthly the following facility-wide information (from all emissions units at the facility) to determine the facility-wide emissions of OCs, each individual HAP, and combined HAPs:
 - a. The company identification for each coating and cleanup/purge material employed.
 - b. The number of gallons of each coating and cleanup/purge material employed.
 - c. The OC content of each coating and cleanup/purge material, in pounds of OCs/gallon of respective coating or cleanup/purge material.
 - d. The individual HAP content for each individual HAP of each coating and cleanup/purge material, in pounds of individual HAP/gallon of respective coating or cleanup/purge material.



- e. The combined HAPs content of each coating and cleanup/purge material, in pounds of combined HAPs/gallon of respective coating or cleanup/purge material.
 - f. The total OC emissions from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of $[(b \times c)/2000]$, respectively, for all coatings and cleanup/purge materials employed.
 - g. The total individual HAP emissions for each individual HAP from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of $[(b \times d)/2000]$, respectively, for all coatings and cleanup/purge materials employed.
 - h. The total combined HAPs emissions from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of $[(b \times e)/2000]$, respectively, for all coatings and cleanup/purge materials employed.
 - i. The rolling, 12-month individual HAP and combined HAP emissions, in tons.
- (3) The permit-to-install (PTI) application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The [Toxic Air Contaminant Statute](#), ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled [Review of New Sources of Air Toxic Emissions, Option A](#), as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) [Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices](#); or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) [Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices](#); the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).



- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., ΔX hours per day and ΔY 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 Δ worst case toxic contaminant(s):

Toxic Contaminant: 2-butoxyethanol (CAS 111-76-2)

TLV (mg/m3): 96.8

Maximum Hourly Emission Rate (lbs/hr): 0.61

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 57

MAGLC (ug/m3): 2305

The permittee has demonstrated that emissions of MEK (CAS 78-93-3) from this emissions unit is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Δ Toxic Air Contaminant Statute, ORC 3704.03(F).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Δ Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Δ Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a



“modification”, the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute⁶, 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 Statute⁶, 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 Statute⁶, 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 Statute⁶, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute⁶, 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 deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. Facility-wide OC emissions of 99.0 tons per year, as a rolling, 12-month summation.
 - ii. Facility-wide individual HAP emissions of 9.9 tons per year, as a rolling, 12-month summation.



- iii. Facility-wide combined HAP emissions of 24.9 tons per year, as a rolling, 12-month summation.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the AToxic Air Contaminant Statute⁶, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations: 1.9 pounds/hour and 8.3 tons/year of OCs

Applicable Compliance Method: The OC emission limitations are based upon the emission unit's potential to emit, as follows:

$$PTE[OCs]_h = (CARC_{max}) \times (OCC_{max}) + (CM_{max}) \times (D); \text{ and}$$

$$PTE[OCs]_y = (PTE[OCs]_h) \times (8760 \text{ hours/year}) \times (1 \text{ ton}/2000 \text{ pounds}).$$

Where:



PTE[OCs]h = 1.9 pounds of OCs/hour [hourly potential to emit OCs];

PTE[OCs]y = 8.3 tons of OCs/year [yearly potential to emit OCs];

CARCmax = 0.88 gallon of coating/hour [maximum coating application rate capacity, coatings as applied after final thinning];

OCCmax = 1.89 pounds of OCs/gallon of coating [maximum OC content of coatings as applied after final thinning];

CMmax = 0.0288 gallon of cleanup material/hour [maximum average hourly usage rate based on 106 gallons used on an operating schedule of 3675 hours/year; and

D = 6.71 pounds of OCs/gallon of cleanup material [density of cleanup material solvent].

As long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be ensured (the annual limitation was established based on multiplying the hourly limitation by 8760, and then dividing by 2000.

- b. Emission Limitation: 40 pounds of OC/day

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements specified in d)(1).

- c. Emission Limitations: Facility-wide emissions of OCs, individual HAPs, and combined HAPs, of 99.0 tons, 9.9 tons and 24.9 tons, respectively.

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements specified in d)(2).

- (2) Formulation data or USEPA Method 24 shall be used to determine the OC and HAP contents of the coatings and cleanup/purge materials. The coating information must be for the coatings as applied, including any thinning solvents added at the emissions unit.

- g) Miscellaneous Requirements

- (1) None.



2. Emissions Unit Group - grp1: R001, R002, R003, R004, R005, R006, R007,

EU ID	Operations, Property and/or Equipment Description
R001	spray booth for coating plastic parts
R002	spray booth for coating plastic parts
R003	spray booth for coating plastic parts
R004	spray booth for coating plastic parts
R005	spray booth for coating plastic parts
R006	spray booth for coating plastic parts
R007	spray booth for coating plastic parts

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 5.07 pounds per hour and, on any day when photochemically reactive materials are used, 40 pounds per day from coatings (as applied after any final thinning) and cleanup/purge materials.
b.	OAC rule 3745-31-05(D)	Facility-wide OC emissions shall not exceed 99.0 tons per year, as a rolling 12-month summation. Facility-wide individual hazardous air pollutant (HAP) emissions shall not exceed 9.9 tons per year, as a rolling, 12-month summation.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Facility combined HAP emissions shall not exceed 24.9 tons per year, as a rolling, 12-month summation.
c.	OAC rule 3745-21-07(G)(2)	The mass emission limitations from OAC rule 3745-21-07 are as stringent (40 pounds/day) or less stringent (5.07 lbs/hr) than the mass emission limitations established pursuant to OAC rule 3745-31-05(A)(3). See b(2)b.

(2) Additional Terms and Conditions

- a. The hourly OC emission limit established pursuant to OAC rule 3745-31-05 is based upon the potential to emit for this emissions unit, as determined from permit application data. Therefore, no record keeping, reporting, or emissions calculations are required to demonstrate compliance with this emission limit.
- b. On February 18, 2008 Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The new OAC rule 3745-21-07 does not establish any requirements for this emissions unit. The rule rescindment and new rule shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07, the requirement to comply with OAC rule 3745-21-07 (G) (2) still exists as part of the federally-approved SIP of Ohio. It should be noted that the requirements to comply with OAC rule 3745-21-07(G)(2) shall terminate on the date the U.S. EPA approves the rule rescindment and new rule as a revision of the Ohio SIP.

c) Operational Restrictions

- (1) The overspray control system shall be employed at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day any photochemically reactive material is used in the coating line:
 - a. The company identification of each coating and cleanup/purge material used.
 - b. The number of gallons of each coating and cleanup/purge material used.
 - c. The OC content of each coating and cleanup/purge material used, in pounds of OCs/gallon of respective coating and cleanup/purge material.



- d. The total emissions from all the coatings and cleanup/purge materials used, in pounds of OCs/day, i.e., the sum of [b x c], respectively, for all coatings and cleanup/purge materials used.
- (2) The permittee shall collect and record monthly the following facility-wide information (from all emissions units at the facility) to determine the facility-wide emissions of OCs, each individual HAP, and combined HAPs:
- a. The company identification for each coating and cleanup/purge material employed.
 - b. The number of gallons of each coating and cleanup/purge material employed.
 - c. The OC content of each coating and cleanup/purge material, in pounds of OCs/gallon of respective coating or cleanup/purge material.
 - d. The individual HAP content for each individual HAP of each coating and cleanup/purge material, in pounds of individual HAP/gallon of respective coating or cleanup/purge material.
 - e. The combined HAPs content of each coating and cleanup/purge material, in pounds of combined HAPs/gallon of respective coating or cleanup/purge material.
 - f. The total OC emissions from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of [(b x c)/2000], respectively, for all coatings and cleanup/purge materials employed.
 - g. The total individual HAP emissions for each individual HAP from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of [(b x d)/2000], respectively, for all coatings and cleanup/purge materials employed.
 - h. The total combined HAPs emissions from all the coatings and cleanup/purge materials employed, in tons, i.e., the sum of [(b x e)/2000], respectively, for all coatings and cleanup/purge materials employed.
 - i. The rolling, 12-month individual HAP and combined HAP emissions, in tons.
- (3) The permit-to-install (PTI) application for each emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute⁶, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A⁶, 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) Δ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices Δ ; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Δ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices Δ ; 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., $\Delta X \Delta$ hours per day and $\Delta Y \Delta$ 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 Δ worst case Δ toxic contaminant(s):

Toxic Contaminant: MEK (CAS 78-93-3)

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 35.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4900

MAGLC (ug/m3): 14,000

The permittee has demonstrated that emissions of MEK (CAS 78-93-3) from this emissions unit is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Δ Toxic Air Contaminant Statute Δ , ORC 3704.03(F).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the



predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any



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

- (6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute⁶, 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 deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
- i. Facility-wide OC emissions of 99.0 tons per year, as a rolling, 12-month summation.
 - ii. Facility-wide individual HAP emissions of 9.9 tons per year, as a rolling, 12-month summation.
 - iii. Facility-wide combined HAP emissions of 24.9 tons per year, as a rolling, 12-month summation.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



(3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting 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. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

f) Testing Requirements

(4) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5.07 pounds of OCs/hour

Applicable Compliance Method:

The hourly OC emission limitation is based upon the emission unit's potential to emit, as demonstrated below:

$$PTE[OCs]_h = (CLC_{max}) \times (OQC_{max}) \times (OCC_{max}) + (CMU_{max}) \times (CMD)$$

Where:

$PTE[OCs]_h = 5.07$ pounds of OCs/hour [hourly potential to emit OCs];

$CLC_{max} = 47$ frames/hour [maximum coating line capacity];

$OQC_{max} = 0.014$ gallon of coating/frame [maximum quantity for optimum quality coating];

$OCC_{max} = 6.42$ pounds/gallon, as applied after final thinning [highest OC content coating];

$CMU_{max} = 308$ gallons of cleanup/purge material/2450 hours [maximum average hourly cleanup/purge material usage of which all solvent is lost through evaporation and none recovered]; and

$CMD = 6.71$ pounds of OCs/gallon of cleanup/purge material [density of cleanup/purge material].

b. Emission Limitation: 40 pounds of OC/day

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements specified in d)(1).

c. Emission Limitations: Facility-wide emissions of OCs, individual HAPs, and combined HAPs, of 99.0 tons, 9.9 tons and 24.9 tons, respectively.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0103966

Facility ID: 1677011093

Effective Date: 12/18/2008

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements specified in Section d)(2).

- (5) Formulation data or USEPA Method 24 shall be used to determine the OC and HAP contents of the coatings and cleanup/purge materials. The coating information must be for the coatings as applied, including any thinning solvents added at the emissions unit.

- g) Miscellaneous Requirements
 - (1) None.