



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

3/26/2010

Certified Mail

Stephen Fogle  
Honda of America Mfg., Inc., Marysville Auto Plant  
Marysville Automobile Plant  
24000 Honda Parkway  
Marysville, OH 43040-9251

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0180010193  
Permit Number: P0105434  
Permit Type: Administrative Modification  
County: Union

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. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

Environmental Review Appeals Commission  
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 Ohio EPA DAPC, Central District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA  
Ohio EPA-CDO





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install**

for

Honda of America Mfg., Inc., Marysville Auto Plant

Facility ID: 0180010193  
Permit Number: P0105434  
Permit Type: Administrative Modification  
Issued: 3/26/2010  
Effective: 3/26/2010





Division of Air Pollution Control
Permit-to-Install
for
Honda of America Mfg., Inc., Marysville Auto Plant

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## Authorization

Facility ID: 0180010193  
Facility Description: Motor Vehicles and Car Bodies  
Application Number(s): A0038240, A0038241  
Permit Number: P0105434  
Permit Description: This permit is to address an emissions increase discovered by Honda on their EDP Coating line. Additional VOC are being emitted from the curing of the coating and additive materials in the drying oven. The permit will also address a change from an assumed 70% capture of the free solvent in the coatings and additives in the coating to 0%. These changes will increase the allowable lbs of VOC/gal of solids applied, but will not exceed the NSPS standard.  
Permit Type: Administrative Modification  
Permit Fee: \$1,000.00  
Issue Date: 3/26/2010  
Effective Date: 3/26/2010

This document constitutes issuance to:

Honda of America Mfg., Inc., Marysville Auto Plant  
24000 Honda Parkway  
Marysville, OH 43040-9251

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

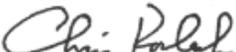
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

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: P0105434  
Permit Description: This permit is to address an emissions increase discovered by Honda on their EDP Coating line. Additional VOC are being emitted from the curing of the coating and additive materials in the drying oven. The permit will also address a change from an assumed 70% capture of the free solvent in the coatings and additives in the coating to 0%. These changes will increase the allowable lbs of VOC/gal of solids applied, but will not exceed the NSPS standard.

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

- |                                   |                   |
|-----------------------------------|-------------------|
| <b>Emissions Unit ID:</b>         | <b>K201</b>       |
| Company Equipment ID:             | PA Line 1 E-Coat  |
| Superseded Permit Number:         | 01-06743          |
| General Permit Category and Type: | Not Applicable    |
| <b>Emissions Unit ID:</b>         | <b>K235</b>       |
| Company Equipment ID:             | New Line 2 E-Coat |
| Superseded Permit Number:         | 01-08782          |
| General Permit Category and Type: | Not Applicable    |



## **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 Ohio EPA DAPC, Central District Office.

- (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 Ohio EPA DAPC, Central District Office. 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 Ohio EPA DAPC, Central District Office 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 Ohio EPA DAPC, Central District Office 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 Ohio EPA DAPC, Central District Office 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 Ohio EPA DAPC, Central District Office.
- 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 Ohio EPA DAPC, Central District Office. 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 by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown 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 reporting requirements identified in this permit 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 deviation report, 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.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

**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.

## **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 following emissions units contained in this permit are subject are subject to MACT Subpart IIII:K201, K235. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Central District Office.

## **C. Emissions Unit Terms and Conditions**



1. K201, PA Line 1 E-Coat

Operations, Property and/or Equipment Description:

Line 1 e-coat with gas-fired makeup air and oven

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) 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)	<p>Volatile organic compound (VOC) emissions shall not exceed 1.12 lbs/gallon of coating, as applied, excluding water and exempt solvents (free solvent).</p> <p>See (2)b. below</p> <p>Emissions from natural gas combustion in emission units K201, K206, K208, R003, R102, R103, P201, P205, and P346 combined shall not exceed:</p> <p>8.14 lbs of particulate emissions/hr;  26.25 tons of particulate emissions/yr;  0.26 lb of SO<sub>2</sub>/hr;  1.16 tons of SO<sub>2</sub>/yr;  46.93 lbs of NO<sub>x</sub>/hr;  196.22 tons of NO<sub>x</sub>/yr;  36.69 lbs of CO/hr;  160.71 tons of CO/yr;  2.50 lbs of VOC/hr; and  10.90 tons of VOC/yr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D) and 3745-21-09(C)(1).</p> <p>See b)(2)e. through b)(2)g. below.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D)	See (2)c. below
c.	OAC rule 3745-21-09(C)(1)(a)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR 60, Subpart MM	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176)	The permittee shall comply with the applicable emission limitation(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3091.  Should Subpart IIII be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.

(2) Additional Terms and Conditions

- a. This emissions unit includes a series of open, uncontrolled tanks (baths) consisting of a mix of water, solvent, resin and paste. Vehicle body frames are dipped into the tanks and then transferred to a curing oven. The curing oven is vented to and controlled by a thermal incinerator. The uncontrolled emissions from the tanks and transfer area released prior to entering the oven are referred to as “free solvent” emissions for the purposes of this permit. The controlled emissions from the oven curing process are referred to as “cure volatiles” for the purposes of this permit.
- b. This emissions unit shall not exceed the following:
  - i. When the solids turnover ratio ( $R_T$ )\* is 0.160 or greater:
    - (a) VOC emissions from the free solvent shall not exceed 0.7 lb/gallon of applied solids (gas), as a monthly volume-weighted average; and

- (b) Total VOC emissions (free solvent + cure volatiles) shall not exceed 1.0 lb/gas, as a monthly volume-weighted average.
- ii. When the solids turnover ratio ( $R_T$ )\* is greater than or equal to 0.040 and less than 0.160:
- (a) VOC emissions from the free solvent shall not exceed  $0.7 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average; and
- (b) Total VOC emissions (free solvent + cure volatiles) shall not exceed  $1.0 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average.
- iii. When the solids turnover ratio ( $R_T$ )\* is less than 0.040:
- (a) No free solvent or total VOC emission limitation (lb/gallon of applied solids) is applicable.
- \* $R_T$  is calculated in accordance with OAC rule 3475-21-09(C)(1)(a)(ii).
- c. Coating and cleanup/purge emissions from Line 1 (K201, K206, K208, R102, and R103) and R003, cleanup/purge emissions from New Line 2 (K235, K236, K237, K238, K239), and cleanup/purge emissions from the emissions units listed in (2)d. below, shall not exceed 1,176 tons VOC combined per rolling, 12-month period.
- d. Air emissions from cleanup/purge material usage from emissions units Z147 (phosphating and dry off oven, line 1), P201 (E-coat sanding booth, line 1), P205 (primer sanding booth, line 1), K007 (final repair booths and ovens, line 1 and 2), K227 (wheel well blackout, line 1), K228 (wheel well blackout, line 2), P346 (on-line repair sanding, line 1), P342 (new line 2 e-coat sanding), P343 (new line 2 surfacer sanding), and P344 (new line 2 repair sanding) associated with operation of Line 1 and Line 2 in the Marysville Auto Plant paint department, shall be recorded, maintained, calculated for recovery emissions credit, reported, and considered covered under and included in emissions estimations completed for demonstrating compliance with the emission limitation specified under b)(2)c. above.
- e. VOC emissions from the e-coat oven shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight. The permittee shall operate the thermal incinerator whenever the e-coat oven is processing units (vehicles). The thermal incinerator shall meet the operational, monitoring, and record keeping requirements of this permit.
- f. The emission limitation specified under OAC rule 3745-31-05(A)(3) is based on an assumed oven capture efficiency of 95%, by weight, as estimated in the permit to install application and shall be used for emissions calculations until testing is conducted. The capture efficiency may be adjusted based on the results of testing required in f)(1)e. below.

- g. Additional natural gas combustion sources (no individual burner greater than 10MMBtu/hr) may be installed in K201, K206, K208, R003, R102, R103, P201, P205, and P346 in the future without obtaining a permit modification if the requirements of the exemption under OAC rule 3745-31-03(A)(1)(a) are met and the total burner capacity remains below 436.8 MMBtu/hr. The installation of these sources will not require a permit modification provided that the new sources comply with the emission limitations for natural gas sources specified in b)(1) of this permit. An accurate list of the natural gas combustion sources in operation shall be maintained by the permittee and made available to Ohio EPA staff upon request.

c) Operational Restrictions

- (1) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the e-coat oven is processing units, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance.
- (2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature of the thermal incinerator when the e-coat oven is processing units (vehicles). The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations and 40 CFR Part 60, Subpart MM, with any modifications deemed necessary by the permittee.
- (3) The total number of units (vehicles) processed through Line 1 emissions units K201, K206, K208, R102, R103, P201, P205, and P346 shall not exceed a production limitation of 245,000 units per rolling, 12-month period, as measured at the "Paint Off" area.  
  
\*\* The "Paint Off" area is measured at the end of each respective paint line and prior to the assembly department.
- (4) This emissions unit shall be operated in accordance with 40 CFR Part 63, Subpart IIII, and shall employ all applicable operating limits and work practices standards as detailed in 40 CFR 63.3093 through 63.3101.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and maintain monthly records which contain the following information for materials added to the e-coat process:
  - a. the name and identification of each coating and solvent added to the EDP system; and
  - b. the VOC content of each coating and solvent (excluding water and exempt solvents), as added to the EDP system, in lbs VOC/gal.
- (2) The permittee shall collect and maintain monthly records which contain the following information for materials added to the EDP system for the purpose of determining the contribution of coatings (resin and paste) and solvent employed in this emissions unit

and to determine compliance with the rolling, 12-month Line 1/Line 2 VOC emission limitations and compliance with the pound of VOC/gas limitation specified in (b)(1)):

- a. the name and identification of each coating and solvent employed;
- b. the VOC content of each coating (free solvent) and solvent employed, in pounds per gallon;
- c. the number of gallons of each coating and solvent employed, in gallons;
- d. the total VOC emissions from all coatings and solvent employed, (excluding cleanup and purge materials maintained in d)(3) and d(4) in pounds per month, i.e., the summation of the materials employed (“b” x “c”);
- e. the volume solids content of each coating added to the system;
- f. the amount of solids, in gallons (“c” x “e” x transfer efficiency);
- g. the monthly volume-weighted average VOC content of the coatings (free solvent), as applied (“d” / “f”);
- h. the VOC content of the cure volatiles of each coating employed\*\*, in pounds per gallon;
- i. the total uncontrolled cure volatile VOC emissions, in pounds per month (“h” x “c”);
- j. the total VOC emissions (free solvent + controlled cure volatiles), in pounds or tons per month, using the most recent test results (“d” + “i” x [1 – oven capture efficiency x thermal incinerator destruction efficiency]);
- k. the total monthly volume-weighted average VOC emissions (free solvent + cure volatiles), in pounds per gallon of applied solids (“j” / “f”);
- l. the turnover ratio ( $R_T$ ) as determined by dividing the total volume of coating solids added to the e-coat system in a month by the volume design capacity (ie, the total liquid volume contained in the e-coat system’s tanks, pumps, recirculating lines, filters, etc. at the system’s designed liquid operating level), in gallons; and
- m. the calculated VOC emission limitation according to the calculation in b)(2)b.ii above if the turnover ratio is greater than or equal to 0.040 and less than 0.160.

\*\*The permittee shall maintain records for the e-coat process that will enable the permittee to calculate the cure volatile VOC emissions, in pounds per gallon, from the coatings (paste and resin e-coat blend). The cure volatiles for the coatings shall be calculated by subtracting the free solvent VOC content, as determined by formulation data or U.S. EPA Method 24, from the total VOC content, as determined by a Modified Method 24 adjusted for a higher curing oven temperature.

Cure Volatiles = Total VOC – Free Solvent.

- (3) Air emissions from cleanup/purge material usage, associated with the operations of the following emissions units in the Marysville Auto Plant, including any recovered material to be credited to these emissions, shall be calculated, recorded, and reported for demonstration of compliance with and covered under the rolling, 12-month VOC limitations:

K007-PA Final Repair  
K201-PA E-coat Line 1  
K206-PA Primer/Surfacer Line 1  
K208-PA Topcoat Line 1  
Z147-PA Line 1 Phosphate Coating & Dry-Off Oven  
P201-PA Line 1 E-Coat Sanding  
P205-PA Line 1 Guide Coat Sanding  
R003-PA Line 2 Inner-Cavity Wax  
R102-PA Line 1 Sealer/Deadner  
R103-PA Line 1 Inner-Cavity Wax  
K227-Line 1 Wheel Well Blackout  
K228-Line 2 Wheel Well Blackout  
K235-New Line 2 E-Coat  
K236-New Line 2 Primer/surfacer  
K237-New Line 2 Topcoat  
K238-New Line 2 Sealer/Deadener/LASD  
K239-Existing Line 1 and New Line 2 Polish  
P346-PA Line 1 On-Line Repair Sanding  
P342-New Line 2 E-coating Sanding  
P343-New Line 2 Surfacer Sanding  
P344-New Line 2 Repair Sanding

The permittee may maintain the records and calculations of emissions from cleanup and purge materials collectively or separately from the above emissions units. These records and calculations shall be made available upon request.

- (4) The permittee shall maintain monthly records which list the following information for the combined cleanup and purge material employed in the emissions units listed in d)(3) above:
- the name and identification of each cleanup/purge material;
  - the VOC content of each cleanup/purge material, in pounds per gallon;
  - the number of gallons of each cleanup/purge material employed; and
  - the total VOC emissions from all cleanup/purge material employed, prior to any credit for recovered materials, in pounds or tons per month, i.e., the summation of the products of the amounts (c) of all cleanup materials and purge materials applied (a) in the emissions units listed in d)(3) above, times each material's VOC content (b).
- (5) If a credit for recovered materials is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for

the recovered cleanup and purge materials and the recovery tank serving the emissions units subject to the applicable VOC emission limitation (see b)(2)c. above):

- a. the date the recovery tank was emptied;
  - b. the date the materials from the recovery tank were shipped off site;
  - c. the number of gallons of materials from the recovery tank shipped off site;
  - d. the VOC content of the materials from the recovery tank, in pounds per gallon, acquired from the testing results of the recovered material; and
  - e. the total VOC emissions (in pounds or tons) from recovered materials (cleanup and purge), to be credited against the total VOC emissions from all coatings, reducing solvents, and other materials applied in emissions units K201, K206, K208, R102, R103, R003, and from the cleanup and purge materials applied in the emissions units listed in d)(3) represented in the applicable emission limitation (see b)(2)c. above), i.e., (c) x (d).
- (6) The permittee shall maintain monthly records in order to document the rolling, 12-month emissions from the Line 1 and Line 2 emissions units, which contain the following information:
- a. the total VOC emissions from all coatings, reducing solvents, and/or other materials (excluding cleanup/purge) employed in emissions units K201, K206, K208, R102, R103 and R003;
  - b. the total VOC emissions from all cleanup and purge materials employed in the emissions units listed in d)(3), subject to the applicable Line 1/Line 2 facility VOC emission limitation in b)(2)c. above;
  - c. if a credit for recovered cleanup and purge materials is used, the total VOC emissions from recovered materials (see d)(5)e. above), to be credited to the calculations of the Line 1/Line 2 VOC emissions, to demonstrate compliance with the applicable emission limitations in b)(2)c., recorded and calculated as per d)(5) above;
  - d. the total net VOC emissions from all coatings, reducing solvents, cleanup/purge, and other materials employed in the emissions units subject to the applicable VOC emission limitation (see b)(2)c. above), in pounds or tons per month, i.e., (a) + (b) - (c); and
  - e. the rolling, 12-month total VOC emissions from the Line 1 and Line 2 emissions units, i.e., (d) + the previous 11 month calculation of the Line 1/Line 2 emissions.
- (7) The permittee shall collect and record the following information for each day:
- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the e-coat oven was processing units, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance; and

- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the e-coat oven was processing units.
- (8) The permittee shall maintain monthly records for emissions units K201, K206, K208, P201, P205, P346, R102 and R103:
- a. the total Line 1 production rate, in units (cars/month), measured at the "PA Off" area; and
  - b. the total Line 1 rolling, 12-month production rate, in units (cars), measured at the "PA Off" area.
- (9) The permittee shall track and record natural gas usage in emissions units K201, K206, K208, R003, R102, R103, P201, P205, and P346 by using the facility's current natural gas tracking method for estimating monthly usage (i.e., subtracting the natural gas usage at the meters not monitoring the paint lines from the main facility meter usage). In the future, the permittee may track natural gas usage for these emissions units by installing dedicated metering devices.
- (10) The permittee shall comply with the applicable notification(s), report(s) and record(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3110 through 63.3131.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly exceedance/deviation reports that identify the following:
- a. any exceedance of the applicable rolling, 12-month VOC emission limitation specified in b)(2)c. above;
  - b. any exceedance of the applicable rolling, 12-month vehicle production limitation;
  - c. all 3-hour blocks of time during which the average temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated that the emissions unit was in compliance (Compliance with this reporting requirement also satisfies compliance with 40 CFR 60.7(c).);
  - d. any exceedance of the applicable free solvent VOC emission rate, in pounds per gallon of applied solids, specified in b)(2)b. above; and
  - e. any exceedance of the applicable total VOC emission rate, in pounds per gallon of applied solids, specified in b)(2)b. above.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions of this permit.

- (2) The permittee shall notify the Ohio EPA, Central District Office in writing of any monthly record showing the use of noncomplying coatings, exceeding 1.12 lbs VOC/gal coating, excluding water and exempt solvents. The notification shall include a copy of such

record and shall be sent to the Ohio EPA, Central District Office within 30 days following the end of the calendar month.

- (3) The permittee shall also submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
- (4) The permittee shall comply with the applicable notification(s), report(s) and record(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3110 through 63.3131.

f) Testing Requirements

- (1) Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:
  - a. Emission Limitations:

1,176 tons VOC per rolling, 12-month period from Line 1 and R003, cleanup/purge from New Line 2, and cleanup/purge from the emissions units listed in b)(2)d. above.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emission limitations shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit subject to these emission limitations, and as specified in d)(6). Any recycle/recovery credit shall be recorded and calculated as per d)(5), and applied as per d)(6). Formulation data or USEPA Method 24 shall be used to determine the organic compound content of primer/guide coatings, topcoats, reducing solvents, purge and cleanup materials. Monthly emissions from coatings and reducing solvents from this emissions unit shall be recorded and calculated as specified in d)(2), and the purge and cleanup materials as specified in d)(3) and d)(4).

Air emissions from cleanup/purge material usage from emissions units Z147 (phosphating and dry off oven, line 1), P201 (E-coat sanding booth, line 1), P205 (primer sanding booth, line 1), K007 (final repair booths and ovens, line 1 and 2), K227 (wheel well blackout, line 1), K228 (wheel well blackout, line 2), P346 (on-line repair sanding, line 1), P342 (new line 2 e-coat sanding), P343 (new line 2 surfacer sanding), and P344 (new line 2 repair sanding) associated with operation of Line 1 and Line 2 in the Marysville Auto Plant paint department, shall be included in emissions estimations performed for demonstrating compliance with the applicable VOC emission limitations. Current permitted requirements and permitted limitations for these emissions units shall be maintained as required in the current permits for each emissions unit.

b. Emission Limitations:

When the solids turnover ratio ( $R_T$ )\* is 0.160 or greater:

VOC emissions from the free solvent shall not exceed 0.7 lb/gallon of applied solids (gas), as a monthly volume-weighted average and the total VOC emissions (free solvent + cure volatiles) shall not exceed 1.0 lb/gas, as a monthly volume-weighted average.

When the solids turnover ratio ( $R_T$ )\* is greater than or equal to 0.040 and less than 0.160:

VOC emissions from the free solvent shall not exceed  $0.7 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average and the total VOC emissions (free solvent + cure volatiles) shall not exceed  $1.0 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average.

Applicable Compliance Method:

Compliance with these emission limitations shall be determined through the monthly record keeping requirements, as specified in d)(2) above.

c. Emission Limitation:

1.12 lbs VOC/gallon of coating, as applied, excluding water and exempt solvents (free solvent)

Applicable Compliance Method:

Compliance with this emission limitation for the E-coat dip tank shall be determined through the monthly recordkeeping as specified in d)(1) Formulation data or U.S. EPA Method 24 shall be used to determine the organic compound contents of the coatings and materials. U.S. EPA Method 24 shall also be used to determine the VOC and water contents of the E-coat mix in the electro deposition dip tank, if required. Calculations of VOC content and compliance procedures shall follow those specified in paragraph (B)(8) of OAC rule 3745-21-10, for Cvoc2.

d. Emission Limitations:

Emissions from natural gas combustion in emission units K201, K206, K208, R003, R102, R103, P201, P205, and P346 combined shall not exceed:

8.14 lbs of particulate emissions/hr;  
26.25 tons of particulate emissions/yr;  
0.26 lb of SO<sub>2</sub>/hr;  
1.16 tons of SO<sub>2</sub>/yr;  
46.93 lbs of NO<sub>x</sub>/hr;  
196.22 tons of NO<sub>x</sub>/yr;  
36.69 lbs of CO/hr;  
160.71 tons of CO/yr;  
2.50 lbs of VOC/hr; and

10.90 tons of VOC/yr.

Applicable Compliance Method:

These emission limitations represent the maximum capacity of the burners. These emission limitations were determined by multiplying the maximum natural gas usage from the burners (436,800 ft<sup>3</sup>/hr) by the emission factors for each pollutant (lbs of pollutant/MM ft<sup>3</sup>) found in "Compilation of Air Pollutant Emission Factors", the 7/98 edition of AP-42, Tables 1.4-1, and 1.4-2. These amounts were multiplied by 8760 hours per year and divided by 2000 pounds per ton, to obtain the potential emissions of the burners. Since these emission limitations reflect the potential emissions of the burners, no additional compliance determination is required.

e. Emission Limitation:

VOC emissions from the e-coat oven shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted to determine the destruction efficiency of the incinerator (i.e., the percent reduction in mass emissions between inlet and outlet). The permittee shall also determine the capture efficiency of cure volatiles in the e-coat oven for this emissions unit.
- ii. Capture efficiency testing shall be conducted within 6 months after issuance of the permit. The most recent destruction efficiency testing was conducted on December 16, 2009.
- iii. The following test methods shall be employed to demonstrate compliance with the VOC control efficiency requirements:
  - (a) Method 1 of 40 CFR Part 60, Appendix A (for sample and velocity traverses);
  - (b) Method 2 of 40 CFR Part 60, Appendix A (for velocity and volumetric flow rates);
  - (c) Method 3 of 40 CFR Part 60, Appendix A (for molecular weight of dry gas stream);
  - (d) Method 4 of 40 CFR Part 60, Appendix A (for moisture content of gas stream); and
  - (e) Methods 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A (for VOC emissions).

The capture efficiency of the e-coat oven controlling cure volatiles shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Central District Office. The Ohio EPA, Central District Office will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

f. Emission Limitation:

The permittee shall comply with the applicable emission limitation(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3091.

Applicable Compliance Method:

See 40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176).

- (2) Formulation data or USEPA Method 24 shall be used to determine the "free" volatile organic compound content of materials added to this emissions unit. USEPA Method 24

shall be used to determine the VOC content of the liquid organic cleanup/purge material recovered for the emissions unit.

- (3) A modified USEPA Method 24 shall be used to determine the "cure" volatile organic compound content of materials added to this emissions unit. The modified USEPA Method 24 shall be performed at process temperatures to appropriately identify "cure" volatile emissions generated in the curing process for the emissions unit.

g) Miscellaneous Requirements

- (1) None.



2. K235, New Line 2 E-Coat

Operations, Property and/or Equipment Description:

New Line 2 e-coat (modification)

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) 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)	<p>The VOC content of the coatings employed shall not exceed 0.75 lb/gallon, as applied, excluding water and exempt solvents (free solvent).</p> <p>See b)(2)b. below</p> <p>The total VOC emissions (free solvent + cure solvent) from K235 shall not exceed 96.1 tons/yr, excluding emissions from natural gas usage.</p> <p>Emissions from natural gas usage in emissions units K235 through K238 shall not exceed:</p> <p>0.82 lb PE (filterable)/hr; 0.26 lb SO2/hr;</p> <p>43.23 lbs NOx/hr; 36.31 lbs CO/hr; and 2.38 lbs VOC/hr</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-09(C)(1)(a), and 40 CFR Part 60 - Subpart MM.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)c. and b)(2)h. below.
b.	OAC rule 3745-31-05(D)	See b)(2)e., b)(2)f., c)(1), and c)(2) below.
c.	OAC rule 3745-21-09(C)(1)(a)	VOC emissions shall not exceed 1.2 lbs/gallon, excluding water and exempt solvents, as applied.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	NSPS - 40 CFR Part 60, Subpart MM	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176)	The permittee shall comply with the applicable emission limitation(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3091.  Should Subpart IIII be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.

(2) Additional Terms and Conditions

- a. This emissions unit includes a series of open, uncontrolled tanks (baths) consisting of a mix of water, solvent, resin and paste. Vehicle body frames are dipped into the tanks and then transferred to a curing oven. The curing oven is vented to and controlled by a thermal incinerator. The uncontrolled emissions from the tanks and transfer area released prior to entering the oven are referred to as “free solvent” emissions for the purposes of this permit. The controlled emissions from the oven curing process are referred to as “cure volatiles” for the purposes of this permit.
- b. This emissions unit shall not exceed the following:
  - i. When the solids turnover ratio ( $R_T$ )\* is 0.160 or greater:
    - (a) VOC emissions from the free solvent shall not exceed 0.7 lb/gallon of applied solids (gas), as a monthly volume-weighted average; and

- (b) Total VOC emissions (free solvent + cure volatiles) shall not exceed 1.0 lb/gas, as a monthly volume-weighted average.
- ii. When the solids turnover ratio ( $R_T$ )\* is greater than or equal to 0.040 and less than 0.160:
  - (a) VOC emissions from the free solvent shall not exceed  $0.7 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average; and
  - (b) Total VOC emissions (free solvent + cure volatiles) shall not exceed  $1.0 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average.
- iii. When the solids turnover ratio ( $R_T$ )\* is less than 0.040:
  - (a) No free solvent or total VOC emission limitation (lb/gallon of applied solids) is applicable.

\* $R_T$  is calculated in accordance with OAC rule 3475-21-09(C)(1)(a)(ii).

- c. The RTO controlling the e-coat oven shall operate at a minimum VOC destruction efficiency of 95 percent, by weight or a maximum outlet concentration of 10 ppm, as propane.
- d. The emission limitation specified under OAC rule 3745-31-05(A)(3) is based on an assumed oven capture efficiency of 95%, by weight, as estimated in the permit to install application and shall be used for emissions calculations until testing is conducted. The capture efficiency may be adjusted based on the results of testing required in f)(1)d. below.
- e. VOC emissions from vehicle production for emissions units K235-K239 and P341 shall not exceed 515.7 tons per rolling, 12-month period, excluding emissions from natural gas usage.
- f. The natural gas usage for emissions units K235-K238 shall not exceed the following emissions limits based upon a rolling, 12-month period: 2.2 tons VOC/yr, 0.24 ton SO<sub>2</sub>/yr, 3.02 tons PE/PM<sub>10</sub>/yr, 39.73 tons NO<sub>x</sub>/yr, and 33.38 tons CO/yr.
- g. All cleanup and purge materials associated with this emissions unit are permitted under PTI 01-6743.
- h. The hourly natural gas emission limitations are based on potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are needed to establish compliance with these limitations.
- i. Additional natural gas combustion sources (no individual burner greater than 10MMBtu/hr) may be installed in New Line 2 in the future without obtaining a permit modification if the requirements of the exemption under OAC rule 3745-31-03(A)(1)(a) are met and the total burner capacity remains below the 440.9 MMBtu/hr specified in the PTI application. The installation of these sources will

not require a permit modification provided that the new sources comply with the emission limitations and operational restrictions for natural gas sources specified in b(2)f. and c)(2) above and the Ohio EPA, Central District Office is notified of installation in writing within 30 days of operation startup.

c) Operational Restrictions

- (1) The total number of units (vehicles) processed through the New Line 2 emissions units K235-K238 and P342-P344 shall not exceed 275,000 units per rolling, 12-month period, as measured at the "Paint Off" area.

\*\* The "Paint Off" area is measured at the end of the New Paint Line 2 but prior to the assembly department.

- (2) The natural gas usage for emissions units K235-K238 shall not exceed 794,652,000 cubic feet per rolling, 12-month period.
- (3) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the e-coat oven is processing units, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance.
- (4) The permittee shall operate the RTO whenever the e-coat oven is processing units.
- (5) The permittee shall burn only natural gas as fuel in this emissions unit.
- (6) This emissions unit shall be operated in accordance with 40 CFR Part 63, Subpart IIII, and shall employ all applicable operating limits and work practices standards as detailed in 40 CFR 63.3093 through 63.3101.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain continuous temperature monitors and recorders which measure and record the combustion temperature of the RTO when the e-coat oven is processing units. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the e-coat oven was processing units, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emission unit is in compliance; and
- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the e-coat oven was processing units

- (2) The permittee shall collect and maintain monthly records which contain the following information for materials added to the e-coat process for the purpose of determining compliance with VOC emission limitation, in lb/gallon:
- a. the name and identification of each coating and solvent added to the EDP system; and
  - b. the VOC content of each coating and solvent (excluding water and exempt solvents), as added to the EDP system, in lbs VOC/gal.
- (3) The permittee shall collect and maintain monthly records which contain the following information for materials added to the EDP system for the purpose of determining the contribution of coatings (resin and paste) and solvent employed in this emissions unit and to determine compliance with the rolling, 12-month VOC emission limitation and compliance with the pound of VOC/gas limitation specified in (b)(1) above):
- a. the name and identification of each coating and solvent employed;
  - b. the VOC content of each coating (free solvent) and solvent employed, in pounds per gallon;
  - c. the number of gallons of each coating and solvent employed, in gallons;
  - d. the total VOC emissions from all coatings and solvent employed, (i.e., the summation of the materials employed ("b" x "c");
  - e. the volume solids content of each coating added to the system;
  - f. the amount of solids, in gallons ("c" x "e" x transfer efficiency);
  - g. the monthly volume-weighted average VOC content of the coatings (free solvent), as applied ("d" / "f");
  - h. the VOC content of the cure volatiles of each coating employed\*\*, in pounds per gallon;
  - i. the total uncontrolled cure volatile VOC emissions, in pounds per month ("h" x "c");
  - j. the total VOC emissions (free solvent + controlled cure volatiles), in pounds or tons per month, using the most recent test results ("d" + "i" x [1 – oven capture efficiency x thermal incinerator destruction efficiency]);
  - k. the total monthly volume-weighted average VOC emissions (free solvent + cure volatiles), in pounds per gallon of applied solids ("j" / "f");
  - l. the turnover ratio ( $R_T$ ) as determined by dividing the total volume of coating solids added to the e-coat system in a month by the volume design capacity (ie, the total liquid volume contained in the e-coat system's tanks, pumps, recirculating lines, filters, etc. at the system's designed liquid operating level), in gallons; and

- m. the calculated VOC emission limitation according to the calculation in b)(2)b.ii above if the turnover ratio is greater than or equal to 0.040 and less than 0.160.

\*\*The permittee shall maintain records for the e-coat process that will enable the permittee to calculate the cure volatile VOC emissions, in pounds per gallon, from the coatings (paste and resin e-coat blend). The cure volatiles for the coatings shall be calculated by subtracting the free solvent VOC content, as determined by formulation data or U.S. EPA Method 24, from the total VOC content, as determined by a Modified Method 24 adjusted for a higher curing oven temperature.

Cure Volatiles = Total VOC – Free Solvent.

- (4) The permittee shall maintain the following records, each calendar month, for New Line 2 emissions units K235- K238 and P342-P344:
- a. the total production rate, in units (vehicles)/month, measured at "Paint Off"; and
  - b. the total rolling, 12-month production rate, in units (vehicles), measured at "Paint Off".
- (5) The permittee shall maintain the following records, each calendar month, for New Line 2 emissions units K235-K239 and P341:
- a. the total summation of controlled (K235-K238) and uncontrolled (K239, P341) VOC emissions from the materials employed in the New Line 2 emission units combined, in tons VOC/month (summation of gallons of material x VOC content of material reduced by the control efficiencies of the control equipment as determined by testing required in f)(1)d. below for controlled units) + (summation of gallons of material x VOC content of material from uncontrolled units); and
  - b. the total rolling, 12-month summation of controlled and uncontrolled VOC emissions for the materials employed in the New Line 2 emission units combined, in tons VOC/rolling, 12-month period.
- (6) The permittee shall maintain the following records, each calendar month, for New Line 2 emissions units K235-K238 for the purpose of determining compliance with the natural gas usage and emission limitations:
- a. the total combined natural gas usage rate for the New Line 2 emission units, in cubic feet/month;
  - b. the total natural gas usage rate, in cubic feet per rolling 12-month period;
  - c. the total summation of VOC, PE/PM10, NOx, SO2, and CO emissions from natural gas usage in the New Line 2 emission units combined, in tons/month; and
  - d. the total rolling, 12-month summation of VOC, PE/PM10, NOx, SO2 and CO emissions from natural gas usage in the New Line 2 emission units combined, in tons/rolling, 12-month period.

- (7) For each day during which the permittee burns fuel other than natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.
- (8) The permittee shall comply with the applicable notification(s), report(s) and record(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3110 through 63.3131.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all 3-hour blocks of time during which the average combustion temperature within the RTO did not comply with the temperature limitation specified in c)(3) above;
  - b. all records showing an exceedance of the 0.75 lb VOC/gallon, as applied, content limitation, excluding water and exempt solvents (free solvent).;
  - c. all monthly records showing a calculated VOC emissions exceedance of the New Line 2 emission limitation of 515.7 tons/rolling 12-month period;
  - d. all monthly records showing an exceedance of the 12-month, rolling vehicle production limitation for New Line 2 of 275,000 vehicles;
  - e. all monthly records showing an exceedance of the total emissions from natural gas usage in New Line 2 emissions units of 2.2 tons VOC/yr, 3.02 tons PE/PM10/yr, 39.73 tons NOx/yr, 0.24 ton SO2/yr, and 33.38 tons CO/yr;
  - f. all monthly records showing an exceedance of the 12-month, rolling natural gas usage limitation for New Line 2 of 794,652,000 cubic feet;
  - g. all records showing that the RTO was not in service when the e-coat oven was processing units;
  - h. any exceedance of the applicable free solvent VOC emission rate, in pounds per gallon of applied solids, specified in b)(2)b. above; and
  - i. any exceedance of the applicable total VOC emission rate, in pounds per gallon of applied solids, specified in b)(2)b. above.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions of this permit.

- (2) The permittee shall submit an annual report by April 15th which specifies the total VOC emissions from this emissions unit. This report may be satisfied by including this emissions unit in the submission of the annual Fee Emission Report.
- (3) The permittee shall submit deviation (excursion) reports to Ohio EPA, Central District Office, that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

- (4) The permittee shall comply with the applicable notification(s), report(s) and record(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3110 through 63.3131.
- f) Testing Requirements
- (1) Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:
- a. Emission Limitations:
- When the solids turnover ratio ( $R_T$ )\* is 0.160 or greater:
- VOC emissions from the free solvent shall not exceed 0.7 lb/gallon of applied solids (gas), as a monthly volume-weighted average and the total VOC emissions (free solvent + cure volatiles) shall not exceed 1.0 lb/gas, as a monthly volume-weighted average.
- When the solids turnover ratio ( $R_T$ )\* is greater than or equal to 0.040 and less than 0.160:
- VOC emissions from the free solvent shall not exceed  $0.7 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average and the total VOC emissions (free solvent + cure volatiles) shall not exceed  $1.0 \times 350^{(0.160 - R_T)}$  lb/gas, as a monthly volume-weighted average.
- Applicable Compliance Method:
- Compliance with these emission limitations shall be determined through the monthly record keeping requirements, as specified in d)(3) above.
- b. Emission Limitation:
- 96.1 tons VOC/year from coating operations, excluding emissions from natural gas usage.
- Applicable Compliance Method:
- Compliance may be determined by the record keeping requirements specified in d)(3)j. above (i.e., summation of the monthly records for each year).
- c. Emission Limitations:
- Emissions from natural gas from emissions units K235-K238 combined:
- 0.82 lb PE (filterable)/hr;  
0.26 lb SO<sub>2</sub>/hr;  
43.23 lbs NO<sub>x</sub>/hr;  
36.31 lbs CO/hr;  
2.38 lbs VOC/hr

**Applicable Compliance Method:**

These limits represent the maximum capacity of each of the natural gas emission sources combined. These emission limitations were determined by multiplying the maximum natural gas usage from the burners by the emission factors for each pollutant (lbs of pollutant/MM ft<sup>3</sup>) found in "Compilation of Air Pollutant Emission Factors", the 7/98 edition of AP-42, Tables 1.4-1, and 1.4-2.

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and Methods 7E for NO<sub>x</sub>, Method 10 for CO, Methods 25, or 25A for VOC, Method 5 for particulate and Method 6C for SO<sub>2</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

**d. Emission Limitation:**

The RTO controlling the e-coat oven shall operate at a minimum VOC destruction efficiency of 95 percent, by weight or a maximum outlet concentration of 10 ppm, as propane.

**Applicable Compliance Method:**

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted to determine the destruction efficiency of the incinerator (i.e., the percent reduction in mass emissions between inlet and outlet). The permittee shall also determine the capture efficiency of cure volatiles in the e-coat oven for this emissions unit.
- ii. Capture efficiency testing shall be conducted within 6 months after issuance of the permit. Destruction efficiency testing was conducted on September 17, 2009.
- iii. The following test methods shall be employed to demonstrate compliance with the total VOC control efficiency:
  - (a) Method 1 of 40 CFR, Part 60, Appendix A (for sample and velocity traverses);
  - (b) Method 2 of 40 CFR, Part 60, Appendix A (for velocity and volumetric flow rates);
  - (c) Method 3 of 40 CFR, Part 60, Appendix A (for molecular weight of dry gas stream);
  - (d) Method 4 of 40 CFR, Part 60, Appendix A (for moisture content of gas stream); and
  - (e) Methods 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A (for VOC emissions).

The capture efficiency of the e-coat oven controlling cure volatiles shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Central District Office. The Ohio EPA, Central District Office will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

e. Emission Limitations:

0.75 lb VOC/gallon of coating, as applied, excluding water and exempt solvents (free solvent)

Applicable Compliance Method:

Compliance with this emission limitation for the E-coat dip tank shall be determined through the monthly recordkeeping as specified in d)(2) Formulation data or U.S. EPA Method 24 shall be used to determine the organic compound contents of the coatings and materials. U.S. EPA Method 24 shall also be used to determine the VOC and water contents of the E-coat mix in the electro deposition dip tank, if required. Calculations of VOC content and compliance

procedures shall follow those specified in paragraph (B)(8) of OAC rule 3745-21-10, for Cvoc2.

f. Emission Limitation:

515.7 tons VOC/ rolling, 12-month period from vehicle production for emissions units K235-K239 and P341, excluding emissions from natural gas usage.

Applicable Compliance Method:

Compliance may be determined by the record keeping specified in d)(5) above.

g. Emission Limitations:

The natural gas usage from emissions units K235-K238 shall not exceed the following emissions limits based upon a rolling, 12-month period:

2.2 tons VOC/yr  
3.02 ton PE/PM10/yr  
39.73 ton NOx/yr  
0.24 ton SO2/yr  
33.38 ton CO/yr.

Applicable Compliance Method:

These limits represent the maximum emissions generated by burning natural gas if the rolling, 12-month usage restriction of 794,652,000 cubic feet is maintained. These emission limitations were determined by multiplying the maximum natural gas usage by the emission factors for each pollutant (lbs of pollutant/MM ft<sup>3</sup>) found in "Compilation of Air Pollutant Emission Factors", the 7/98 edition of AP-42, Tables 1.4-1, and 1.4-2.

h. Emission Limitation:

275,000 vehicles processed through the New Line 2 emissions units K235- K238 and P342-P344 per rolling, 12-month period, as measured at "Paint Off."

Applicable Compliance Method:

Compliance may be determined by the record keeping specified in d)(4) above.

i. Emission Limitation:

The permittee shall comply with the applicable emission limitation(s) as specified in 40 CFR Part 63, Subpart IIII, (Surface Coating of Automobile and Light-Duty Trucks), in accordance with 40 CFR Parts 63.3091.

Applicable Compliance Method:

See 40 CFR Part 63, Subpart IIII (40 CFR 63.3080-3176).

- (2) Formulation data or USEPA Method 24 shall be used to determine the “free” volatile organic compound content of materials added to this emissions unit. USEPA Method 24 shall be used to determine the VOC content of the liquid organic cleanup/purge material recovered for the emissions unit.
  - (3) A modified USEPA Method 24 shall be used to determine the “cure” volatile organic compound content of materials added to this emissions unit. The modified USEPA Method 24 shall be performed at process temperatures to appropriately identify “cure” volatile emissions generated in the curing process for the emissions unit.
- g) Miscellaneous Requirements
- (1) None.