State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL** **CERTIFIED MAIL**
**UNION COUNTY**

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

**Application No:** 01-08167

**DATE:** 7/6/00

Honda of America Mfg Inc Marysville Moto
Joanna Bambeck
24000 Honda Parkway
Marysville, OH 430409190

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$1400** will be due. Please do not submit any payment now.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

**CC:** **USEPA** **CDO**

**DRAFT PERMIT TO INSTALL 01-08167**

| | |
|---|---|
| Application Number: | 01-08167 |
| APS Premise Number: | 0180000130 |
| Permit Fee: | **To be entered upon final issuance** |
| Name of Facility: | Honda of America Mfg Inc Marysville Moto |
| Person to Contact: | Joanna Bambeck |
| Address: | 24000 Honda Parkway<br>Marysville, OH 430409190 |

Location of proposed air contaminant source(s) [emissions unit(s)]:
**24000 Honda Pkwy**
**Marysville, Ohio**

Description of proposed emissions unit(s):
**Plastic parts coating line.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

## A. State and Federally Enforceable Permit To Install General Terms and Conditions

### 1. Monitoring and Related Recordkeeping 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:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. 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:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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.

iv. 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.

**2. 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 appropriate Ohio EPA District Office or local air agency 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).

**3. 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.

**4. 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.

**5. Severability Clause**

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.

**6. 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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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.

**7. 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 this Permit To Install.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

a. 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.

b. 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:

i. 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.

ii. 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.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. 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.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. 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.

**10. Permit To Operate Application**

a. If 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).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

**B. State Only Enforceable Permit To Install General Terms and Conditions**

**1. Compliance Requirements**

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

**2. Reporting Requirements Related to Monitoring and Recordkeeping 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 appropriate Ohio EPA District Office or local air agency.

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 appropriate Ohio EPA District Office or local air agency. 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., 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.)

**3. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**4. 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.

**5. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete

within a reasonable time a continuing program of installation or modification. 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.

**6. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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 prove to be inadequate or cannot meet applicable standards.

**7. 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.

**8. 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).

**9. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**10. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

| Pollutant | Tons Per Year |
|---|---|
| OC | 118.14 |
| PM | 16.81 |
| $SO_2$ | 0.10 |
| NOx | 15.94 |
| CO | 13.39 |

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P307 - POPA Paint Effluent System, existing system | OAC rule 3745-21-07(G)(9) | Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), See Section A.2.b below. |
| | OAC rule 3745-31-05(D) | Organic compound emissions from the POPA paint effluent systems, emission units P307 and P340, shall not exceed 10.22 tons per rolling 12 months; and see A.I.2.a below. |
| | OAC rule 3745-31-05(A)(3) | The organic compound content of materials added to the paint effluent system shall not exceed 6.06 lbs/gal, as applied. |

**2. Additional Terms and Conditions**

**2.a** The maximum usage of detackifier, flocculent, defoamer, and/or other organic compound (OC) containing materials shall not exceed 84,609 gallons per rolling 12 months, total for the two POPA paint sludge wastewater systems, P307 and P340. Any materials not containing organic compounds, as packaged, need not be included in this usage limitation. This usage may be changed or modified upon the submission and acceptance (by the Ohio EPA Central District Office) of calculations demonstrating that the maximum rolling 12-month emissions of OCs from the POPA paint effluent system, emission units P307 and

P340, do not exceed 10.22 tons. To ensure federal enforceability during the first 12 months of this permit, actual emissions from the previous 12 calendar months of operation shall be used to calculate the 12-month rolling emissions.

**2.b** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for P307 and P340:

   a. the company identification for each material added to the paint sludge wastewater system, for the purpose of paint overspray flocculation and removal, algae/bacterial control, and water treatment;

   b. the number of gallons of each OC-containing material added to the paint sludge wastewater systems; and,

   c. the OC content of each OC-containing material added, in pounds per gallon.

2. The permittee shall maintain the following monthly records for P307 and P340:

   a. the total OC emissions from all OC-containing materials added to the POPA paint effluent system, in tons per rolling 12-month period; and,

   b. the total gallons of all OC-containing materials added to the POPA paint effluent system, in gallons per rolling 12-month period.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitation. These reports are due by the date described in Part I - General Terms and Conditions of this permit, under Section A(1).

2. The permittee shall submit deviation (excursion) reports which identify any record showing the addition of a photochemically reactive material to the POPA paint effluent system.

3. The permittee shall submit deviation (excursion) reports which identify any record showing the addition of a material to the POPA paint effluent system that exceeds the VOC content limitation of 6.06 lbs/gallon, as applied.

4. The permittee shall submit annual reports which specify the total emissions of organic compounds 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.

## V. Testing Requirements

1. Emission Limitation

10.22 tons OC/rolling 12 months from both POPA paint sludge wastewater systems

Applicable Compliance Method

Compliance with this limit shall be determined through maintaining monthly records of the name of materials added to the paint sludge wastewater, the amount of each organic material added, and the OC content of each material. Formulation data from the manufacturer or USEPA Method 24 shall be used to determine the OC content of each material. Emissions shall be calculated as follows:

Maximum OC emissions = ∑ OC content of each material (lbs/gal) X the amount of each material used each month (gal), plus the same calculation of emissions from the previous 11 months.

2. Emission Limitation

6.06 lbs OC/gallon of material, as applied

Applicable Compliance Method

Compliance with this OC per gallon limit shall be determined through monthly recordkeeping of each OC containing material added to the paint effluent system, and documentation of the organic compound content of each material used. Formulation data from the manufacturer or USEPA Method 24 shall be used to determine the organic compound content of the materials.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P307 - POPA Paint Effluent System, existing system | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit P307 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the only pollutant exceeding 1 ton per year:

Pollutant: Petroleum distillate

TLV: VM & P Naphtha 1,370 mg/m3; Stoddard solvent 573 mg/m3; Gasoline 890mg/m3

Maximum Hourly Emission Rate: 2.41 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 0.086 mg/m3

MAGLC: 13.63 mg/m3 for Stoddard solvent

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

This Permit to Install (01-08167) supercedes and replaces PTI #01-6645 issued 12/8/99.

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P340 - POPA Paint Effluent System, new system | OAC rule 3745-21-07(G)(9) | Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Section A.2.b below. |
| | OAC rule 3745-31-05(D) | Organic compound emissions from the POPA paint effluent systems, emission units P307 and P340, shall not exceed 10.22 tons per rolling 12 months; and see A.I.2.a below. |
| | OAC rule 3745-31-05(A)(3) | The organic compound content of materials added to the paint effluent system shall not exceed 6.06 lbs/gal, as applied. |

**2. Additional Terms and Conditions**

**2.a** The maximum usage of detackifier, flocculent, defoamer, and/or other organic compound (OC) containing materials shall not exceed 84,609 gallons per rolling 12 months, total for the two POPA paint sludge wastewater systems, P307 and P340. Any materials not containing organic compounds, as packaged, need not be included in this usage limitation. This usage may be changed or modified upon the submission and acceptance (by the Ohio EPA Central District Office) of calculations demonstrating that the maximum rolling 12-month emissions of OCs from the POPA paint effluent system,

emission units P307 and P340, do not exceed 10.22 tons. To ensure federal enforceability during the first 12 months of this permit, actual emissions from the previous 12 calendar months of operation shall be used to calculate the 12-month rolling emissions.

**2.b** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for P307 and P340:

   a. the company identification for each material added to the paint sludge wastewater system, for the purpose of paint overspray flocculation and removal, algae/bacterial control, and water treatment;

   b. the number of gallons of each OC-containing material added to the paint sludge wastewater systems; and,

   c. the OC content of each OC-containing material added, in pounds per gallon.

2. The permittee shall maintain the following monthly records for P307 and P340:

   a. the total OC emissions from all OC-containing materials added to the POPA paint effluent system, in tons per rolling 12-month period; and,

   b. the total gallons of all OC-containing materials added to the POPA paint effluent system, in gallons per rolling 12-month period.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitation. These reports are due by the date described in Part I - General Terms and Conditions of this permit, under Section A(1).

2. The permittee shall submit deviation (excursion) reports which identify any record showing the addition of a photochemically reactive material to the POPA paint effluent system.

3. The permittee shall submit deviation (excursion) reports which identify any record showing the addition of a material to the POPA paint effluent system that exceeds the VOC content limitation

of 6.06 lbs/gallon, as applied.

4. The permittee shall submit annual reports which specify the total emissions of organic compounds 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.

## V. Testing Requirements

1. Emission Limitation

10.22 tons OC/rolling 12 months from both POPA paint sludge wastewater systems

Applicable Compliance Method

Compliance with this limit shall be determined through maintaining monthly records of the name of materials added to the paint sludge wastewater, the amount of each organic material added, and the OC content of each material. Formulation data from the manufacturer or USEPA Method 24 shall be used to determine the OC content of each material. Emissions shall be calculated as follows:

Maximum OC emissions = ∑ OC content of each material (lbs/gal) X the amount of each material used each month (gal), plus the same calculation of emissions from the previous 11 months.

2. Emission Limitation

6.06 lbs OC/gallon of material, as applied

Applicable Compliance Method

Compliance with this OC per gallon limit shall be determined through monthly recordkeeping of each OC containing material added to the paint effluent system, and documentation of the organic compound content of each material used. Formulation data from the manufacturer or USEPA Method 24 shall be used to determine the organic compound content of the materials.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P340 - POPA Paint Effluent System, new system | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit P340 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the only pollutant exceeding 1 ton per year:

Pollutant: Petroleum distillate

TLV: VM & P Naphtha 1,370 mg/m3; Stoddard solvent 573 mg/m3; Gasoline 890mg/m3

Maximum Hourly Emission Rate: 1.62 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 0.083 mg/m3

MAGLC: 13.63 mg/m3 for Stoddard solvent

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | |
|---|---|---|
| R200 - Primer Booth for POPA plastic parts coating lines, with infrared or natural gas oven | OAC rule 3745-21-07(G)(9) | |
| | OAC rule 3745-31-05(D) | |
| | OAC rule 3745-31-05(A)(3) | |
| | | OAC rule 3745-17-07(A)(1) |
| | | OAC rule 3745-17-11(B)(1) |

| Applicable Emissions Limitations/Control Measures | |
|---|---|
| Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Section A.I.2.a below. | 0.920 tons CO/yr;<br>0.019 lb PM/hr;<br>0.083 ton PM/yr;<br>0.014 lb OC/hr;<br>0.060 ton OC/yr**;**<br>0.0015 lbs $SO_2$/hr;<br>0.007 lbs $SO_2$/yr, and see Section A.2.c below. |
| Organic compound emissions from the application and drying of coatings, and from the cleanup, and purge materials usage shall not exceed 107 tons per rolling 12-months from the POPA coating operations, including emission units R200, R201, R202, R203, and R204, see Section A.I.2.b below. | Particulate emissions from the overspray of POPA coatings shall not exceed 15.6 tons per year from emission units R200, R201, R202, R203, and R204.<br><br>Particulate emissions from overspray in R200 shall not exceed 5.67 lbs/hour.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).<br><br>Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Organic compound emissions from the application and drying of POPA coatings in the primer booth shall not exceed 17.44 lbs/hr. | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| Emissions from natural gas usage in the primer drying oven shall not exceed:<br><br>0.250 lb NOx/hr;<br>1.095 tons NOx/yr;<br>0.210 lb CO/hr; | |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

**2.b** Net gallons and OC emissions may be calculated using the difference between materials used, minus materials collected for off-site recovery, recycle, and/or disposal. A composite sample of each shipment of recovered materials, including any combination of coating, cleanup, and purge, shall be collected and tested (on or off-site), using USEPA Method 24, to determine the volatile content. The OC emissions credit shall be calculated using the test result(s) of each shipment along with the amount of recovered materials each composite sample represents. No VOC credit, to the POPA emissions, shall be calculated using a volume or weight of recovered material greater than that which was added to the recovery container(s) from POPA operations during any month, nor a VOC concentration greater than the testing result(s) or MSDS/product information sheet(s) of the material(s) collected. If coatings, purge, and/or cleanup materials from POPA coating operations are added to the "plant's" solvent recovery, for off-site recycle and/or disposal, and if a credit for recovered material(s) is used to show compliance with the 107 tons of OC per rolling 12-month POPA facility limit, records of the recovered material shall be maintained as required in Section A.III.1. Materials not included as "used" in the POPA coating operations (materials collected from emission units other than R200, R201, R202, R203, and R204) shall also not be included in the credit to these emissions and material use (gallons). The credit shall be applied during the month in which the material is shipped off-site.

**2.c** Emissions from natural gas usage in the primer air supply unit shall not exceed the following limits, which are based on the potential emissions using current AP-42 emission factors, dated 7/98.

Emissions from the air supply unit (ASU), serving the primer (R200), basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and

0.026 lb $SO_2$/yr.

## II. Operational Restrictions

1. The permittee shall operate the downdraft air system whenever this emissions unit is in operation.

2. The POPA coating operations shall be limited to a production limit of 630,998 plastic part sets per rolling 12 months (set consists of two plastic parts).

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each month for the coating operations:

   a. the company identification for each coating, coating component, and cleanup material employed, as packaged;

   b. the number of gallons of each coating, coating component, and cleanup material employed;

   c. the organic compound content of each coating, coating component, and cleanup material, in pounds per gallon;

   d. the total organic compound emissions for all coatings, coating components, and cleanup materials, in pounds or tons per month;

   e. the total amount of purge and cleanup material collected and shipped for recycle/recovery and/or disposal at an outside facility, and the mass of OC to be credited to the calculations of the POPA coating operations emissions, to demonstrate compliance with the limit in Section A.I.2.a, tested and calculated as per Section A.I.2.b;

   f. the net OC emissions from all cleanup/purge material employed, in pounds or tons per month; and,

   g. the rolling 12-month total OC emissions from the coatings, coating components, and cleanup materials employed in the POPA coating operations, including emissions units R200, R201, R202, R203, and R204.

2. The permittee shall maintain records that document any time periods when the downdraft air system was not in service when the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any record showing the

application of a photochemically reactive material in this emission unit.

2. The permittee shall notify the Ohio EPA Central District Office in writing of any record showing that the downdraft air system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

3. The permittee shall submit annual reports which specify the total emissions of particulates and organic compounds 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 submit deviation reports which identify any record of an exceedance of the 12-month rolling emission limitation.

## V. Testing Requirements

1. Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

<u>Emission Limitation</u>

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

Applicable Compliance Method

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation

107 tons of VOC per rolling 12 months from the POPA coating operations

Applicable Compliance Method

Compliance with this rolling 12-month facility OC limit shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit included in this limit. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of coatings, reducing solvents, cleanup and purge materials. The emissions, contributed to this limit by this emissions unit, shall be calculated by adding the monthly emissions, derived from emission calculations from all coatings and materials applied and cleanup material/purge used each month, in this emissions unit. The OC emissions credit shall be calculated using the OC test result(s) of each shipment along with the amount of recovered material each composite sample represents. Twelve-month rolling emissions shall be calculated by adding the current monthly emission calculations from the emissions unit to the previous 11 month's emission calculations.

3. Emission Limitation

17.44 lbs of OC per hour

Applicable Compliance Method

Until testing is completed, compliance with the hourly OC emission limit shall be determined through monthly recordkeeping of the coating, purge and cleaning material usage, the organic compound content of each material used, and documentation of the maximum coating OC content and maximum usage in any hour. Formulation data from the manufacturer or US EPA Method 24 shall be used to determine the organic compound content of the coatings, purge, and cleaning materials to be used in the calculation of emissions. Potential hourly emissions shall be calculated by multiplying the maximum OC content of any coating, purge, and cleanup materials used (lbs OC/gallon of material) times each materials' maximum usage in any hour (gallons/hr). Worst case calculations shall be documented as follows:

OC emissions/hr =(1.2 lbs OC/gal of primer coating) x (9.95 gal/hr) = 11.94 lbs OC/hr

OC emissions/hr = (6.082 lbs OC/gal of repair primer) x (0.905 gal/hr) = 5.50 lbs OC/hr

Total: 17.44 lbs/hr

4. Emission Limitation from natural gas usage in the drying ovens

0.250 lb NOx/hr;
1.095 tons NOx/yr;
0.210 lb CO/hr;
0.920 ton CO/yr;
0.019 lb PM/hr;
0.083 ton PM/yr;
0.014 lb OC/hr;
0.060 ton OC/yr**;**
0.0015 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr from burners

Emissions from the air supply unit (ASU), serving the primer, basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr; and ,
0.236 ton OC/yr
0.006 lb $SO_2$/hr
0.026 lb $SO_2$/yr

Applicable Compliance Method

These limits represent the maximum capacity of the burners. These emission limitations were determined by multiplying the maximum natural gas usage from the burners (2,500 $ft^3$/hr and 9,800 $ft^3$/hr respectively ) by the emission factors for each pollutant (lbs of pollutant/MM $ft^3$) 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 limits reflect the potential emissions of the burners, no additional compliance determination is required.

5. Emissions Limit

5.67 lbs particulate emissions/hr from overspray in the primer booth;
15.6 tons particulate emissions/yr, from overspray from the combined plastic parts coating operations, emission units R200, R201, R202, R203, and R204

Compliance Method

Compliance with the hourly and annual particulate emission (PE) limit may be determined through recordkeeping of the annual coating usage and documentation of worst case hourly emissions. The highest solids content of any coating shall be derived from formulation data contained in each manufacturer's MSDS and may be used to determine the worst-case solids content of any coating. A calculation of worst-case particulate emissions shall be calculated by multiplying the maximum solids content of any coating or coating type (primer and repair primer) used in this emissions unit (by % or lbs/gal) times the maximum coating usage in any hour and year, as follows:

PE /hr = (lbs solids/gal of coating) x (gal/hr) x (100%-TE) x (100%-CE) = <5.67 lb PE/hr

PE/hr from prime coating = (9.50 lbs/gal) x (34.68% solids) x (9.95 gal/hr) x (100%-40%) x (100%-95%) = 0.98 lb/hr

PE/hr from repair coating = (7.87 lbs/gal) x (22.71% solids) x (0.90 gal/hr) x (100%-40%) x (100%-95%) = 0.05 lb/hr

Total PE/hr = 1.03 lbs/hr

Annual emissions shall be documented as follows:

Annual PE (tons/yr) = (maximum solids/gal of coating) x (maximum gal/year) x (100%-TE) x (100%-CE) x (1 ton/2000 lbs)

Annual PE from primer (tons/yr) = (9.50 lbs/gal) x (34.68% solids) x (36,654 gal/yr) x (100%-40%) x (100%-95%) x (1 ton/2000 lbs) = 1.81 tons/yr

Annual PE from primer repair = (7.87 lbs/gal) x (22.71% solids) x (3,544 gal/hr) x (100%-40%) x (100%-95%) x (1 ton/2000 lbs) = 0.095 ton/yr

Total POPA PE/yr = 1.91 tons from primer booth + 5.98 tons and 4.73 tons from basecoat booths A & B + 1.49 from clearcoat booth A + 1.49 from clearcoat booth B = 15.60 tons PE/yr

where:

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (40%)

CE= capture efficiency, for downdraft air system (95%)

An annual summation of the worst-case or actual particulate emissions calculations for emissions units R200, R201, R202, R203, and R204, shall demonstrate compliance with the 15.6 tons per year facility limit for these emission units.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| R200 - Primer Booth for POPA plastic parts coating lines, with infrared or natural gas oven | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Cyclohexanone

TLV: 96 mg/m$^3$ (skin)

Maximum Hourly Emission Rate: 51.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1.19 mg/m$^3$

MAGLC: 2.29 mg/m$^3$

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

This Permit to Install (01-08167) replaces the requirements for the operations of emissions unit R301 in the PTI numbered 01-0999 issued 2/8/89, upon the startup of these coating operations.

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | |
|---|---|---|
| R201 - Basecoat Booth A for POPA plastic parts coating line; with natural gas air supply, unit A; and booth with concentrator, unit A, and RTO control | OAC rule 3745-21-07(G)(9) | |
| | OAC rule 3745-31-05(D) | |
| | | OAC rule 3745-17-07(A)(1) |
| | OAC rule 3745-31-05(A)(3) | |
| | | OAC rule 3745-17-11(B)(1) |

| Applicable Emissions Limitations/Control Measures | |
|---|---|
| Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Sections A.I.2.a below. | |
| Organic compound emissions from the application and drying of coatings, and from the cleanup, and purge materials usage shall not exceed 107 tons per rolling 12-months from the POPA coating operations, including emission units R200, R201, R202, R203, and R204 see Section A.I.2.b below. | |
| Organic compound emissions from the application and drying of POPA coatings in basecoat booth A shall not exceed 11.21 lbs/hr. | |
| Emissions from natural gas usage in the basecoat drying operations and emissions control shall not exceed the limits in Section A.I.2.c. | |
| Particulate emissions from | the overspray of POPA coatings shall not exceed 15.6 tons per year from emission units R200, R201, R202, R203, and R204. |
| | Particulate emissions from overspray in R201 shall not exceed 11.32 pounds/hour. |
| | The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). |
| | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

**2.b** Net gallons and OC emissions may be calculated using the difference between materials used, minus materials collected for off-site recovery, recycle, and/or disposal. A composite sample of each shipment of recovered materials, including any combination of coating, cleanup, and purge, shall be collected and tested (on or off-site), using USEPA Method 24, to determine the volatile content. The OC emissions credit shall be calculated using the test result(s) of each shipment along with the amount of recovered materials each composite sample represents. No VOC credit, to the POPA emissions, shall be calculated using a volume or weight of recovered material greater than that which was added to the recovery container(s) from POPA operations during any month, nor a VOC concentration greater than the testing result(s) or MSDS/product information sheet(s) of the material(s) collected. If coatings, purge, and/or cleanup materials from POPA coating operations are added to the "plant's" solvent recovery, for off-site recycle and/or disposal, and if a credit for recovered material(s) is used to show compliance with the 107 tons of OC per rolling 12-month POPA facility limit, records of the recovered material shall be maintained as required in Section A.III.1. Materials not included as "used" in the POPA coating operations (materials collected from emission units other than R200, R201, R202, R203, and R204) shall also not be included in the credit to these emissions and material use (gallons). The credit shall be applied during the month in which the material is shipped off-site.

**2.c** Emissions from natural gas usage in the basecoat drying operations and RTO control shall not exceed the following limits, which are based on the potential emissions using current AP-42 emission factors, dated 7/98.

Emissions from the air supply unit (ASU), serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,

0.026 lb $SO_2$/yr

Emissions from the concentrator A heater, serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

## II. Operational Restrictions

1. The OC emissions from this emissions unit shall be collected by a concentrator and vented to a regenerative thermal oxidizer (RTO) which together shall reduce OC emissions from these coating operations by an overall 82%.

2. The POPA coating operations shall be limited to a production limit of 630,998 plastic part sets per rolling 12 months (set consists of two plastic parts).

3. The average combustion temperature within the RTO and the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

4. The permittee shall operate the downdraft air system whenever this emissions unit is in operation.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each month for the coating operations:

   a. the company identification for each coating, coating component, and cleanup material employed, as packaged;

   b. the number of gallons of each coating, coating component, and cleanup material employed;

   c. the organic compound content of each coating, coating component, and cleanup material, in pounds per gallon;

   d. the total organic compound emissions for all coatings, coating components, and cleanup materials, in pounds or tons per month;

   e. the total amount of purge and cleanup material collected and shipped for recycle/recovery and/or disposal at an outside facility, and the mass of OC to be credited to the calculations of the POPA coating operations emissions, to demonstrate compliance with the limit in Section A.I.2.a, tested and calculated as per Section A.I.2.b;

   f. the net OC emissions from all cleanup/purge material employed, in pounds or tons per month; and,

g. the rolling 12-month total OC emissions from the coatings, coating components, and cleanup materials employed in the POPA coating operations, including emissions units R200, R201, R202, R203, and R204.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO and thermal incinerator when the emissions unit is in operation. 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, with any modifications deemed necessary by the permittee.

3. The permittee shall collect and record the following information each day for the control equipment:

a a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and,

b. all 3-hour blocks of time during which the average combustion temperatures within the RTO and thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

4. The permittee shall maintain records that document any time periods when the downdraft air system was not in service when the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any record showing the application of a photochemically reactive material in this emission unit.

2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the RTO and thermal incinerator does not comply with the temperature limitation specified above. These reports shall be submitted as required in the General Terms and Conditions, Part I, Section A.1.c.

3. The permittee shall notify the Ohio EPA Central District Office in writing of any record showing that the downdraft air system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

4. The permittee shall submit annual reports which specify the total emissions of particulates and organic compounds 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.

5. The permittee shall submit deviation reports which identify any record of an exceedance of the 12-month rolling emission limitation.

## V. Testing Requirements

1 Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

Emission Limitation

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

Applicable Compliance Method

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation

107 tons of VOC per rolling 12-months from plastic parts coating operations combined

Applicable Compliance Method

Compliance with this rolling 12-month facility OC limit shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit included in this limit. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of coatings, reducing solvents, cleanup and purge materials. The emissions, contributed to this limit by this emissions unit, shall be calculated by adding the monthly emissions, derived from emission calculations from all coatings and materials applied and cleanup material/purge used each month, in this emissions unit. The OC emissions credit shall be calculated using the OC test result(s) of each shipment along with the amount of recovered material each composite sample represents. Twelve-month rolling emissions shall be calculated by adding the current monthly emission calculations from the emissions unit to the previous 11 month's emission calculations.

3. Emission Limitation

11.21 lbs of OC per hour

Applicable Compliance Method

Until testing is completed, compliance with the hourly OC emission limit shall be determined through monthly recordkeeping of the coating, purge and cleaning material usage, the organic compound content of each material used, and documentation of the maximum coating OC content and maximum usage in any hour. Formulation data from the manufacturer or US EPA Method 24 shall be used to determine the organic compound content of the coatings, purge, and cleaning materials to be used in the calculation of emissions. Potential hourly emissions shall be calculated by multiplying the maximum OC content of any coating, purge, and cleanup materials used (lbs OC/gallon of material) times each materials' maximum usage in any hour (gallons/hr). Worst case calculations shall be documented as follows:

Uncontrolled OC emissions/hr =(4.8 lbs OC/gal of coating) x (14.57 gal/hr) = 69.93 lbs OC/hr

From oven incinerator:
OC emissions/hr = (69.93 lbs OC/hr) x (2% to oven) x (100%-90% incinerator control efficiency) = 0.14 lbs OC/hr

From RTO:
OC emissions/hr = (69.93 lbs OC/hr) x (93% concentrator capture efficiency) x (93% concentrator removal efficiency) x (100%-95% RTO control efficiency) = 3.02 lbs OC/hr

From Concentrator:
OC emissions/hr = (69.93 lbs OC/hr) x (93% concentrator capture efficiency) x (100%-93% concentrator removal efficiency) = 4.55 lbs OC/hr

From miscellaneous losses:
OC emissions/hr = (69.93 lbs OC/hr) x (5% lost) = 3.50 lbs OC/hr

Total: 11.21 lbs/hr

4. <u>Emission Limitation from natural gas usage</u>

Emissions from the air supply unit (ASU), serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;

0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,
0.026 lb $SO_2$/yr.

Emissions from the concentrator A heater, serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Applicable Compliance Method

These emission limitations were determined by multiplying the maximum natural gas usage from the air supply unit burners, the concentrator heater, and the RTO burners with it's natural gas injection system (9,800 $ft^3$/hr, 2,600 $ft^3$/hr, and 8,000 $ft^3$/hr, respectively) by the emission factors for each pollutant (lbs of pollutant/MM $ft^3$) 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, for all but the RTO burners (6,000 $ft^3$/hr), and are divided by 2000 pounds per ton, to obtain the potential emissions of the burners. The RTO burners shall be fueled with the organic compounds, for which it was installed to control; and it is estimated that it shall require no more than 50 hours of natural gas fuel to begin it's combustion. Other than the RTO burners, these limits reflect the potential emissions of the burners, no additional compliance determination is required.

5. Emissions Limit

11.32 lbs particulate emissions/hr from overspray in the basecoat booth A;
15.6 tons particulate emissions/yr, from overspray from the combined plastic parts coating operations, emission units R200, R201, R202, R203, and R204

Compliance Method

Compliance with the hourly and annual particulate emission (PE) limit may be determined through recordkeeping of the annual coating usage and documentation of worst case hourly emissions. The highest solids content of any coating shall be derived from formulation data contained in each manufacturer's MSDS and may be used to determine the worst-case solids content of any coating. A calculation of worst-case particulate emissions shall be calculated by multiplying the maximum solids content of any coating or coating type (basecoats) used in this emissions unit (by % or lbs/gal) times the maximum coating usage in any hour and year, as follows:

PE /hr = (lbs solids/gal of coating) x (gal/hr) x (100%-TE) x (100%-CE) = <11.32 lb PE/hr

PE/hr from basecoatings = (10.32 lbs/gal) x (66.61% solids) x (14.57 gal/hr) x (100%-42%) x (100%-95%) = 2.904 lb/hr

Annual emissions shall be documented as follows:

Annual PE (tons/yr) = (maximum solids/gal of coating) x (maximum gal/year) x (100%-TE) x (100%-CE) x (1 ton/2000 lbs)

Annual PE from basecoat operations and coating service parts* (tons/yr) = (10.32 lbs/gal) x (66.61% solids) x (60,023 gal/yr) x (100%-42%) x (100%-95%) x (1 ton/2000 lbs) = 5.98 tons/yr

Total POPA PE/yr = 1.91 tons from primer booth + 5.98 tons and 4.73 tons from basecoat booths A & B + 1.49 from clearcoat booth A + 1.49 from clearcoat booth B = 15.60 tons PE/yr

where:

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (42%)

CE= capture efficiency, for downdraft air system (95%)

* Service parts may be coated in either POPA basecoat booth, R201 or R203. The total calculation of emissions from the coating of service parts is documented above, however

the service part coating usage may be distributed between the two basecoat operations.

An annual summation of the worst-case or actual particulate emissions calculations for emissions units R200, R201, R202, R203, and R204, shall demonstrate compliance with the 15.6 tons per year facility limit for these emission units.

6. Emission Limitation

11.21 lbs of OC/hr

Compliance Method

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

a. the emission testing shall be conducted within 6 months after project completion and mass production startup;

b. the emission testing shall be conducted to demonstrate compliance with the hourly emission limit and the 82% overall reduction of OC emissions from the coating operations;

c. the following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 1 for sample and velocity traverses; Method 2 for velocity and volumetric flow rates; Method 24 for the OC content of the coating; Methods 25 or 25A for destruction efficiency after the RTO; Methods 18, 25 or 25A for the OC concentration in the effluent gas leaving the concentrator; and Methods 204A through F for the capture efficiency of the concentrator. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; or, any Method of testing may be required/requested by the Administrator; and,

d. 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.

e. 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).

f. 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.

g. A comprehensive written report on the results of the emissions 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.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| R201 - Basecoat Booth A for POPA plastic parts coating line; with natural gas air supply, unit A; and booth with concentrator, unit A, and RTO control | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Cyclohexanone

TLV: 96 mg/m$^3$ (skin)

Maximum Hourly Emission Rate: 51.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1.19 mg/m$^3$

MAGLC: 2.29 mg/m$^3$

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | |
|---|---|---|
| R202 - Clearcoat Booth A for POPA plastic parts coating line; with natural gas oven, unit A, vented to incinerator; and booth with concentrator, unit A, and RTO control | OAC rule 3745-21-07(G)(9) | |
| | OAC rule 3745-31-05(D) | |
| | | OAC rule 3745-17-07(A)(1) |
| | OAC rule 3745-31-05(A)(3) | |
| | | OAC rule 3745-17-11(B)(1) |

| Applicable Emissions Limitations/Control Measures |
| --- |
| xempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Section A.I.2.a below. |
| Organic compound emissions from the application and drying of coatings, and from the cleanup, and purge materials usage shall not exceed 107 tons per rolling 12-months from the POPA coating operations, including emission units R200, R201, R202, R203, and R204, see Section A.I.2.b below. |
| Organic compound emissions from the application and drying of POPA coatings in clearcoat booth A shall not exceed 5.67 lbs/hr. |
| Emissions from natural gas usage in the clearcoat drying operations and emissions control shall not exceed the limits in Section A.I.2.c. |
| Particulate emissions from the overspray of POPA coatings shall not exceed 15.6 tons per year from emission units R200, R201, R202, R203, and R204. |
| Particulate emissions from overspray in R202 shall not exceed 6.14 pounds/hour. |
| The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). |
| Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

**2.b** Net gallons and OC emissions may be calculated using the difference between materials used, minus materials collected for off-site recovery, recycle, and/or disposal. A composite sample of each shipment of recovered materials, including any combination of coating, cleanup, and purge, shall be collected and tested (on or off-site), using USEPA Method 24, to determine the volatile content. The OC emissions credit shall be calculated using the test result(s) of each shipment along with the amount of recovered materials each composite sample represents. No VOC credit, to the POPA emissions, shall be calculated using a volume or weight of recovered material greater than that which was added to the recovery container(s) from POPA operations during any month, nor a VOC concentration greater than the testing result(s) or MSDS/product information sheet(s) of the material(s) collected. If coatings, purge, and/or cleanup materials from POPA coating operations are added to the "plant's" solvent recovery, for off-site recycle and/or disposal, and if a credit for recovered material(s) is used to show compliance with the 107 tons of OC per rolling 12-month POPA facility limit, records of the recovered material shall be maintained as required in Section A.III.1. Materials not included as "used" in the POPA coating operations (materials collected from emission units other than R200, R201, R202, R203, and R204) shall also not be included in the credit to these emissions and material use (gallons). The credit shall be applied during the month in which the material is shipped off-site.

**2.c** Emissions from natural gas usage in the basecoat drying operations and RTO control shall not exceed the following limits, which are based on the potential emissions using current AP-42 emission factors, dated 7/98.

Emissions from the air supply unit (ASU), serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,

0.026 lb $SO_2$/yr.

Emissions from the concentrator A heater, serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the incinerator burners following clearcoat A & B (R202 and R204) booths, shall not exceed:

0.200 lb NOx/hr;
0.876 ton NOx/yr;
0.168 lb CO/hr;
0.736 ton CO/yr;
0.015 lb PM/hr;
0.067 ton PM/yr;
0.011 lb OC/hr;
0.048 ton OC/yr;
0.001 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the final drying oven, following the clearcoat A (R202) booth, shall not exceed:

0.253 lb NOx/hr;
1.108 tons NOx/yr;
0.213 lb CO/hr;
0.931 ton CO/yr;
0.019 lb PM/hr;
0.084 ton PM/yr;
0.014 lb OC/hr;
0.061 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.006 lb $SO_2$/yr.

## II. Operational Restrictions

1. The OC emissions from this emissions unit shall be collected by a concentrator and vented to a regenerative thermal oxidizer (RTO) which together shall reduce OC emissions from these coating operations by an overall 82%.

2. The POPA coating operations shall be limited to a production limit of 630,998 plastic part sets per rolling 12 months (set consists of two plastic parts).

3. The average combustion temperature within the RTO and the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

4. The permittee shall operate the downdraft air system whenever this emissions unit is in operation.

**III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each month for the coating operations:

   a. the company identification for each coating, coating component, and cleanup material employed, as packaged;

   b. the number of gallons of each coating, coating component, and cleanup material employed;

   c. the organic compound content of each coating, coating component, and cleanup material, in pounds per gallon;

   d. the total organic compound emissions for all coatings, coating components, and cleanup materials, in pounds or tons per month;

   e. the total amount of purge and cleanup material collected and shipped for recycle/recovery and/or disposal at an outside facility, and the mass of OC to be credited to the calculations of the POPA coating operations emissions, to demonstrate compliance with the limit in Section A.I.2.a, tested and calculated as per Section A.I.2.b;

   f. the net OC emissions from all cleanup/purge material employed, in pounds or tons per month; and,

   g. the rolling 12-month total OC emissions from the coatings, coating components, and cleanup materials employed in the POPA coating operations, including emissions units R200, R201, R202, R203, and R204.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO and thermal incinerator when the emissions unit is in operation. 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, with any modifications deemed necessary by the permittee.

3. The permittee shall collect and record the following information each day for the control equipment:

   a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and,

b. all 3-hour blocks of time during which the average combustion temperatures within the RTO and thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

4. The permittee shall maintain records that document any time periods when the downdraft air system was not in service when the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any record showing the application of a photochemically reactive material in this emission unit.

2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the RTO and thermal incinerator does not comply with the temperature limitation specified above. These reports shall be submitted as required in the General Terms and Conditions, Part I, Section A.1.c.

3. The permittee shall notify the Ohio EPA Central District Office in writing of any record showing that the downdraft air system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

4. The permittee shall submit annual reports which specify the total emissions of particulates and organic compounds 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.

5. The permittee shall submit deviation reports which identify any record of an exceedance of the 12-month rolling emission limitation.

## V. Testing Requirements

1. Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

<u>Emission Limitation</u>

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

<u>Applicable Compliance Method</u>

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation

107 tons of VOC per rolling 12-months from plastic parts coating operations combined

Applicable Compliance Method

Compliance with this rolling 12-month facility OC limit shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit included in this limit. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of coatings, reducing solvents, cleanup and purge materials. The emissions, contributed to this limit by this emissions unit, shall be calculated by adding the monthly emissions, derived from emission calculations from all coatings and materials applied and cleanup material/purge used each month, in this emissions unit. The OC emissions credit shall be calculated using the OC test result(s) of each shipment along with the amount of recovered material each composite sample represents. Twelve-month rolling emissions shall be calculated by adding the current monthly emission calculations from the emissions unit to the previous 11 month's emission calculations.

3. Emission Limitation

5.67 lbs of OC per hour

Applicable Compliance Method

Until testing is completed, compliance with the hourly OC emission limit shall be determined through monthly recordkeeping of the coating, purge and cleaning material usage, the organic compound content of each material used, and documentation of the maximum coating OC content and maximum usage in any hour. Formulation data from the manufacturer or US EPA Method 24 shall be used to determine the organic compound content of the coatings, purge, and cleaning materials to be used in the calculation of emissions. Potential hourly emissions shall be calculated by multiplying the maximum OC content of any coating, purge, and cleanup materials used (lbs OC/gallon of material) times each materials' maximum usage in any hour (gallons/hr). Worst case calculations shall be documented as follows:

Uncontrolled OC emissions/hr =(4.099 lbs OC/gal of coating) x (8.62 gal/hr) = 35.33 lbs OC/hr

From oven incinerator:
OC emissions/hr = (35.33 lbs OC/hr) x (2% to oven) x (100%-90% incinerator control efficiency) = 0.07 lbs OC/hr

From RTO:
OC emissions/hr = (35.33 lbs OC/hr) x (93% concentrator capture efficiency) x (93% concentrator removal efficiency) x (100%-95% RTO control efficiency) = 1.53 lbs OC/hr

From Concentrator:
OC emissions/hr = (35.33 lbs OC/hr) x (93% concentrator capture efficiency) x (100%-93% concentrator removal efficiency) = 2.30 lbs OC/hr

From miscellaneous losses:
OC emissions/hr = (35.33 lbs OC/hr) x (5% lost) = 1.77 lbs OC/hr

Total: 5.67 lbs/hr

4. Emission Limitation from natural gas usage

Emissions from the air supply unit (ASU), serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,
0.026 lb $SO_2$/yr.

Emissions from the concentrator A heater, serving the basecoat A (R201) and clearcoat A (R202) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;

0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the incinerator burners following clearcoat A & B (R202 and R204) booths, shall not exceed:

0.200 lb NOx/hr;
0.876 ton NOx/yr;
0.168 lb CO/hr;
0.736 ton CO/yr;
0.015 lb PM/hr;
0.067 ton PM/yr;
0.011 lb OC/hr;
0.048 ton OC/yr;
0.001 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the final drying oven, following the clearcoat A (R202) booth, shall not exceed:

0.253 lb NOx/hr;
1.108 tons NOx/yr;
0.213 lb CO/hr;
0.931 ton CO/yr;
0.019 lb PM/hr;
0.084 ton PM/yr;
0.014 lb OC/hr;
0.061 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.006 lb $SO_2$/yr.

Applicable Compliance Method

These emission limitations were determined by multiplying the maximum natural gas usage from the air supply unit burners, the concentrator heater, the RTO burners with it's natural gas

injection system, and the final drying oven A (9,800 $ft^3$/hr, 2,600 $ft^3$/hr, 8,000 $ft^3$/hr, 2,000 $ft^3$/hr, and 2,530 $ft^3$/hr respectively) by the emission factors for each pollutant (lbs of pollutant/MM $ft^3$) 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, for all but the RTO burners (6,000 $ft^3$/hr), and are divided by 2000 pounds per ton, to obtain the potential emissions of the burners.

The RTO burners shall be fueled with the organic compounds, for which it was installed to control; and it is estimated that it shall require no more than 50 hours of natural gas fuel to begin it's combustion. Other than the RTO burners, these limits reflect the potential emissions of the burners, no additional compliance determination is required.

5. Emissions Limit

6.14 lbs particulate emissions/hr from overspray in the clearcoat booth A;
15.6 tons particulate emissions/yr, from overspray from the combined plastic parts coating operations, emission units R200, R201, R202, R203, and R204

Compliance Method

Compliance with the hourly and annual particulate emission (PE) limit may be determined through recordkeeping of the annual coating usage and documentation of worst case hourly emissions. The highest solids content of any coating shall be derived from formulation data contained in each manufacturer's MSDS and may be used to determine the worst-case solids content of any coating. A calculation of worst-case particulate emissions shall be calculated by multiplying the maximum solids content of any coating or coating type (clearcoats) used in this emissions unit (by % or lbs/gal) times the maximum coating usage in any hour and year, as follows:

PE /hr = (lbs solids/gal of coating) x (gal/hr) x (100%-TE) x (100%-CE) = <6.14 lb PE/hr

PE/hr from clearcoatings = (8.36 lbs/gal) x (53.94% solids) x (8.62 gal/hr) x (100%-53%) x (100%-95%) = 0.913 lb/hr

Annual emissions shall be documented as follows:

Annual PE (tons/yr) = (maximum solids/gal of coating) x (maximum gal/year) x (100%-TE) x (100%-CE) x (1 ton/2000 lbs)

Annual PE from basecoat operations and coating service parts* (tons/yr) = (8.36 lbs/gal) x (53.94% solids) x (28,098 gal/yr) x (100%-53%) x (100%-95%) x (1 ton/2000 lbs) = 1.49 tons/yr

Total POPA PE/yr = 1.91 tons from primer booth + 5.98 tons and 4.73 tons from basecoat booths A & B + 1.49 from clearcoat booth A + 1.49 from clearcoat booth B = 15.60 tons PE/yr

where:

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (53%)

CE= capture efficiency, for downdraft air system (95%)

An annual summation of the worst-case or actual particulate emissions calculations for emissions units R200, R201, R202, R203, and R204, shall demonstrate compliance with the 15.6 tons per year facility limit for these emission units.

6. Emission Limitation

5.67 lbs of OC/hr

Compliance Method

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

a. the emission testing shall be conducted within 6 months after project completion and mass production startup;

b. the emission testing shall be conducted to demonstrate compliance with the hourly emission limit and the 82% overall reduction of OC emissions from the coating operations;

c. the following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 1 for sample and velocity traverses; Method 2 for velocity and volumetric flow rates; Method 24 for the OC content of the coating; Methods 25 or 25A for destruction efficiency after the RTO; Methods 18, 25 or 25A for the OC concentration in the effluent gas leaving the concentrator; and Methods 204A through F for the capture efficiency of the concentrator. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; or, any Method of testing may be required/requested by the Administrator; and,

d. 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.

e. 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).

f. 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.

g. A comprehensive written report on the results of the emissions 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.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| R202 - Clearcoat Booth A for POPA plastic parts coating line; with natural gas oven, unit A, vented to incinerator; and booth with concentrator, unit A, and RTO control | | |

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Cyclohexanone

TLV: 96 mg/m$^3$ (skin)

Maximum Hourly Emission Rate: 51.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1.19 mg/m$^3$

MAGLC: 2.29 mg/m$^3$

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air

Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | |
|---|---|---|
| R203 - Basecoat Booth B for POPA plastic parts coating line; with natural gas air supply, unit B; and booth with concentrator, unit B, and RTO control | OAC rule 3745-21-07(G)(9) | |
| | OAC rule 3745-31-05(D) | |
| | | OAC rule 3745-17-07(A)(1) |
| | OAC rule 3745-31-05(A)(3) | |
| | | OAC rule 3745-17-11(B)(1) |

| Applicable Emissions Limitations/Control Measures | |
|---|---|
| Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Section A.I.2.a below. | 15.6 tons per year from emission units R200, R201, R202, R203, and R204. |
| Organic compound emissions from the application and drying of coatings, and from the cleanup, and purge materials usage shall not exceed 107 tons per rolling 12-months from the POPA coating operations, including emission units R200, R201, R202, R203, and R204, see Sections A.I.2.b below. | Particulate emissions from overspray in R203 shall not exceed 11.32 pounds/hour. |
| Organic compound emissions from the application and drying of POPA coatings in basecoat booth shall not exceed 11.21 lbs/hr. | The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). |
| Emissions from natural gas usage in the basecoat drying operations and emissions control shall not exceed the limits in Section A.I.2.c below. | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Particulate emissions from the overspray of POPA coatings shall not exceed | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

**2.b** Net gallons and OC emissions may be calculated using the difference between materials used, minus materials collected for off-site recovery, recycle, and/or disposal. A composite sample of each shipment of recovered materials, including any combination of coating, cleanup, and purge, shall be collected and tested (on or off-site), using USEPA Method 24, to determine the volatile content. The OC emissions credit shall be calculated using the test result(s) of each shipment along with the amount of recovered materials each composite sample represents. No VOC credit, to the POPA emissions, shall be calculated using a volume or weight of recovered material greater than that which was added to the recovery container(s) from POPA operations during any month, nor a VOC concentration greater than the testing result(s) or MSDS/product information sheet(s) of the material(s) collected. If coatings, purge, and/or cleanup materials from POPA coating operations are added to the "plant's" solvent recovery, for off-site recycle and/or disposal, and if a credit for recovered material(s) is used to show compliance with the 107 tons of OC per rolling 12-month POPA facility limit, records of the recovered material shall be maintained as required in Section A.III.1. Materials not included as "used" in the POPA coating operations (materials collected from emission units other than R200, R201, R202, R203, and R204) shall also not be included in the credit to these emissions and material use (gallons). The credit shall be applied during the month in which the material is shipped off-site.

**2.c** Emissions from natural gas usage in the basecoat drying operations and RTO control shall not exceed the following limits, which are based on the potential emissions using current AP-42 emission factors, dated 7/98.

Emissions from the air supply unit (ASU), serving the primer (R200), basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,

0.026 lb $SO_2$/yr.

Emissions from the concentrator B heater, serving the basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

## II. Operational Restrictions

1. The OC emissions from this emissions unit shall be collected by a concentrator and vented to a regenerative thermal oxidizer (RTO) which together shall reduce OC emissions from these coating operations by an overall 82%.

2. The POPA coating operations shall be limited to a production limit of 630,998 plastic part sets per rolling 12 months (set consists of two plastic parts).

3. The average combustion temperature within the RTO and the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

4. The permittee shall operate the downdraft air system whenever this emissions unit is in operation.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each month for the coating operations:

   a. the company identification for each coating, coating component, and cleanup material employed, as packaged;

   b. the number of gallons of each coating, coating component, and cleanup material employed;

   c. the organic compound content of each coating, coating component, and cleanup material, in pounds per gallon;

   d. the total organic compound emissions for all coatings, coating components, and cleanup materials, in pounds or tons per month;

   e. the total amount of purge and cleanup material collected and shipped for recycle/recovery and/or disposal at an outside facility, and the mass of OC to be credited to the calculations of the POPA coating operations emissions, to demonstrate compliance with the limit in Section A.I.2.a, tested and calculated as per Section A.I.2.b;

   f. the net OC emissions from all cleanup/purge material employed, in pounds or tons per month; and,

g. the rolling 12-month total OC emissions from the coatings, coating components, and cleanup materials employed in the POPA coating operations, including emissions units R200, R201, R202, R203, and R204.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO and thermal incinerator when the emissions unit is in operation. 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, with any modifications deemed necessary by the permittee.

3. The permittee shall collect and record the following information each day for the control equipment:

   a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and,

   b. all 3-hour blocks of time during which the average combustion temperatures within the RTO and thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

4. The permittee shall maintain records that document any time periods when the downdraft air system was not in service when the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any record showing the application of a photochemically reactive material in this emission unit.

2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the RTO and thermal incinerator does not comply with the temperature limitation specified above. These reports shall be submitted as required in the General Terms and Conditions, Part I, Section A.1.c.

3. The permittee shall notify the Ohio EPA Central District Office in writing of any record showing that the downdraft air system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

4. The permittee shall submit annual reports which specify the total emissions of particulates and organic compounds 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.

5. The permittee shall submit deviation reports which identify any record of an exceedance of the 12-month rolling emission limitation.

## V. Testing Requirements

1. Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

   Emission Limitation

   Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

   Applicable Compliance Method

   If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation

   107 tons of VOC per rolling 12-months from plastic parts coating operations combined

   Applicable Compliance Method

   Compliance with this rolling 12-month facility OC limit shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit included in this limit. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of coatings, reducing solvents, cleanup and purge materials. The emissions, contributed to this limit by this emissions unit, shall be calculated by adding the monthly emissions, derived from emission calculations from all coatings and materials applied and cleanup material/purge used each month, in this emissions unit. The OC emissions credit shall be calculated using the OC test result(s) of each shipment along with the amount of recovered material each composite sample represents. Twelve-month rolling emissions shall be calculated by adding the current monthly emission calculations from the emissions unit to the previous 11 month's emission calculations.

3. Emission Limitation

   11.21 lbs of OC per hour

   Applicable Compliance Method

Until testing is completed, compliance with the hourly OC emission limit shall be determined through monthly recordkeeping of the coating, purge and cleaning material usage, the organic compound content of each material used, and documentation of the maximum coating OC content and maximum usage in any hour. Formulation data from the manufacturer or US EPA Method 24 shall be used to determine the organic compound content of the coatings, purge, and cleaning materials to be used in the calculation of emissions. Potential hourly emissions shall be calculated by multiplying the maximum OC content of any coating, purge, and cleanup materials used (lbs OC/gallon of material) times each materials' maximum usage in any hour (gallons/hr). Worst case calculations shall be documented as follows:

Uncontrolled OC emissions/hr =(4.8 lbs OC/gal of coating) x (14.57 gal/hr) = 69.93 lbs OC/hr

From oven incinerator:
OC emissions/hr = (69.93 lbs OC/hr) x (2% to oven) x (100%-90% incinerator control efficiency) = 0.14 lbs OC/hr

From RTO:
OC emissions/hr = (69.93 lbs OC/hr) x (93% concentrator capture efficiency) x (93% concentrator removal efficiency) x (100%-95% RTO control efficiency) = 3.02 lbs OC/hr

From Concentrator:
OC emissions/hr = (69.93 lbs OC/hr) x (93% concentrator capture efficiency) x (100%-93% concentrator removal efficiency) = 4.55 lbs OC/hr

From miscellaneous losses:
OC emissions/hr = (69.93 lbs OC/hr) x (5% lost) = 3.50 lbs OC/hr

Total: 11.21 lbs/hr

4. <u>Emission Limitation from natural gas usage</u>

Emissions from the air supply unit (ASU), serving the primer, basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;

0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,
0.026 lb $SO_2$/yr.

Emissions from the concentrator B heater, serving the basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Applicable Compliance Method

These emission limitations were determined by multiplying the maximum natural gas usage from the air supply unit burners, the concentrator heater, and the RTO burners with it's natural gas injection system (9,800 $ft^3$/hr, 2,600 $ft^3$/hr, and 8,000 $ft^3$/hr, respectively) by the emission factors for each pollutant (lbs of pollutant/MM $ft^3$) 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, for all but the RTO burners (6,000 $ft^3$/hr), and are divided by 2000 pounds per ton, to obtain the potential emissions of the burners. The RTO burners shall be fueled with the organic compounds, for which it was installed to control; and it is estimated that it shall require no more than 50 hours of natural gas fuel to begin it's combustion. Other than the RTO burners, these limits reflect the potential emissions of the burners, no additional compliance determination is required.

5. Emissions Limit

11.32 lbs particulate emissions/hr from overspray in the basecoat booth B;
15.6 tons particulate emissions/yr, from overspray from the combined plastic parts coating operations, emission units R200, R201, R202, R203, and R204

Compliance Method

Compliance with the hourly and annual particulate emission (PE) limit may be determined through recordkeeping of the annual coating usage and documentation of worst case hourly emissions. The highest solids content of any coating shall be derived from formulation data contained in each manufacturer's MSDS and may be used to determine the worst-case solids content of any coating. A calculation of worst-case particulate emissions shall be calculated by multiplying the maximum solids content of any coating or coating type (basecoats) used in this emissions unit (by % or lbs/gal) times the maximum coating usage in any hour and year, as follows:

PE /hr = (lbs solids/gal of coating) x (gal/hr) x (100%-TE) x (100%-CE) = <11.32 lb PE/hr

PE/hr from basecoatings = (10.32 lbs/gal) x (66.61% solids) x (14.57 gal/hr) x (100%-42%) x (100%-95%) = 2.904 lb/hr

Annual emissions shall be documented as follows:

Annual PE (tons/yr) = (maximum solids/gal of coating) x (maximum gal/year) x (100%-TE) x (100%-CE) x (1 ton/2000 lbs)

Annual PE from basecoat operations and coating service parts* (tons/yr) = (10.32 lbs/gal) x (66.61% solids) x (47,499 gal/yr) x (100%-42%) x (100%-95%) x (1 ton/2000 lbs) =4.73 tons/yr

Total POPA PE/yr = 1.91 tons from primer booth + 5.98 tons and 4.73 tons from basecoat booths A & B + 1.49 from clearcoat booth A + 1.49 from clearcoat booth B = 15.60 tons PE/yr

where:

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (42%)

CE= capture efficiency, for downdraft air system (95%)

* Service parts may be coated in either POPA basecoat booth, R201 or R203. The total

calculation of emissions from the coating of service parts is documented in the terms of R201, however the service part coating usage may be distributed between the two basecoat operations.

An annual summation of the worst-case or actual particulate emissions calculations for emissions units R200, R201, R202, R203, and R204, shall demonstrate compliance with the 15.6 tons per year facility limit for these emission units.

6. Emission Limitation

11.21 lbs of OC/hr

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

a. the emission testing shall be conducted within 6 months after project completion and mass production startup;

b. the emission testing shall be conducted to demonstrate compliance with the hourly emission limit and the 82% overall reduction of OC emissions from the coating operations;

c. the following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 1 for sample and velocity traverses; Method 2 for velocity and volumetric flow rates; Method 24 for the OC content of the coating; Methods 25 or 25A for destruction efficiency after the RTO; Methods 18, 25 or 25A for the OC concentration in the effluent gas leaving the concentrator; and Methods 204A through F for the capture efficiency of the concentrator. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; or, any Method of testing may be required/requested by the Administrator; and,

d. 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.

e. 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).

f. 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.

g. A comprehensive written report on the results of the emissions 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.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| R203 - Basecoat Booth B for POPA plastic parts coating line; with natural gas air supply, unit B; and booth with concentrator, unit B, and RTO control | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Cyclohexanone

TLV: 96 mg/m$^3$ (skin)

Maximum Hourly Emission Rate: 51.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1.19 mg/m$^3$

MAGLC: 2.29 mg/m$^3$

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air

Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

This Permit to Install (01-08167) replaces the requirements for the operations of emissions units R302 and P303 in the PTI numbered 01-0999 issued 2/8/89, upon the startup of these coating operations.

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | |
|---|---|---|
| R204 - Clearcoat Booth B for POPA plastic parts coating line; with natural gas oven, unit B, vented to incinerator; and booth with concentrator, unit B, and RTO control | OAC rule 3745-21-07(G)(9) | |
| | OAC rule 3745-31-05(D) | |
| | | OAC rule 3745-17-07(A)(1) |
| | | OAC rule 3745-17-11(B)(1) |
| | OAC rule 3745-31-05(A)(3) | |

| Applicable Emissions Limitations/Control Measures | |
|---|---|
| Exempt from the limitations in 3745-21-07(G)(2) by using only non-photochemically reactive materials or material exempt under 3745-21-07(G)(9), see Section A.I.2.a below. | 15.6 tons per year from emission units R200, R201, R202, R203, and R204. |
| Organic compound emissions from the application and drying of coatings, and from the cleanup, and purge materials usage shall not exceed 107 tons per rolling 12-months from the POPA coating operations, including emission units R200, R201, R202, R203, and R204 see Sections A.I.2.b below. | Particulate emissions from overspray in R204 shall not exceed 6.14 pounds/hour. |
| Organic compound emissions from the application and drying of POPA coatings in clearcoat booth B shall not exceed 5.67 lbs/hr. | The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). |
| Emissions from natural gas usage in the clearcoat drying operations and emissions control shall not exceed the limits in Section A.I.2.c. | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Particulate emissions from the overspray of POPA coatings shall not exceed | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall use only non-photochemically reactive materials or materials exempt per OAC 3745-21-07(G)(9).

**2.b** Net gallons and OC emissions may be calculated using the difference between materials used, minus materials collected for off-site recovery, recycle, and/or disposal. A composite sample of each shipment of recovered materials, including any combination of coating, cleanup, and purge, shall be collected and tested (on or off-site), using USEPA Method 24, to determine the volatile content. The OC emissions credit shall be calculated using the test result(s) of each shipment along with the amount of recovered materials each composite sample represents. No VOC credit, to the POPA emissions, shall be calculated using a volume or weight of recovered material greater than that which was added to the recovery container(s) from POPA operations during any month, nor a VOC concentration greater than the testing result(s) or MSDS/product information sheet(s) of the material(s) collected. If coatings, purge, and/or cleanup materials from POPA coating operations are added to the "plant's" solvent recovery, for off-site recycle and/or disposal, and if a credit for recovered material(s) is used to show compliance with the 107 tons of OC per rolling 12-month POPA facility limit, records of the recovered material shall be maintained as required in Section A.III.1. Materials not included as "used" in the POPA coating operations (materials collected from emission units other than R200, R201, R202, R203, and R204) shall also not be included in the credit to these emissions and material use (gallons). The credit shall be applied during the month in which the material is shipped off-site.

**2.c** Emissions from natural gas usage in the basecoat drying operations and RTO control shall not exceed the following limits, which are based on the potential emissions using current AP-42 emission factors, dated 7/98.

Emissions from the air supply unit (ASU), serving the primer (R200), basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,

0.026 lb $SO_2$/yr.

Emissions from the concentrator B heater, serving the basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;
0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the incinerator burners following clearcoat A & B (R202 and R204) booths, shall not exceed:

0.200 lb NOx/hr;
0.876 ton NOx/yr;
0.168 lb CO/hr;
0.736 ton CO/yr;
0.015 lb PM/hr;
0.067 ton PM/yr;
0.011 lb OC/hr;
0.048 ton OC/yr;
0.001 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the final drying oven, following the clearcoat B (R204) booth, shall not exceed:

0.253 lb NOx/hr;
1.108 tons NOx/yr;
0.213 lb CO/hr;
0.931 ton CO/yr;
0.019 lb PM/hr;
0.084 ton PM/yr;
0.014 lb OC/hr;
0.061 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.006 lb $SO_2$/yr.

## II. Operational Restrictions

1. The OC emissions from this emissions unit shall be collected by a concentrator and vented to a regenerative thermal oxidizer (RTO) which together shall reduce OC emissions from these coating operations by an overall 82%.

2. The POPA coating operations shall be limited to a production limit of 630,998 plastic part sets per rolling 12 months (set consists of two plastic parts).

3. The average combustion temperature within the RTO and the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

4. The permittee shall operate the downdraft air system whenever this emissions unit is in operation.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each month for the coating operations:

   a. the company identification for each coating, coating component, and cleanup material employed, as packaged;

   b. the number of gallons of each coating, coating component, and cleanup material employed;

c. the organic compound content of each coating, coating component, and cleanup material, in pounds per gallon;

d. the total organic compound emissions for all coatings, coating components, and cleanup materials, in pounds or tons per month;

e. the total amount of purge and cleanup material collected and shipped for recycle/recovery and/or disposal at an outside facility, and the mass of OC to be credited to the calculations of the POPA coating operations emissions, to demonstrate compliance with the limit in Section A.I.2.a, tested and calculated as per Section A.I.2.b;

f. the net OC emissions from all cleanup/purge material employed, in pounds or tons per month; and,

g. the rolling 12-month total OC emissions from the coatings, coating components, and cleanup materials employed in the POPA coating operations, including emissions units R200, R201, R202, R203, and R204.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO and thermal incinerator when the emissions unit is in operation. 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, with any modifications deemed necessary by the permittee.

3. The permittee shall collect and record the following information each day for the control equipment:

a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and,

b. all 3-hour blocks of time during which the average combustion temperatures within the RTO and thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

4. The permittee shall maintain records that document any time periods when the downdraft air system was not in service when the emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any record showing the application of a photochemically reactive material in this emission unit.

2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the RTO and thermal incinerator does not comply with the temperature limitation specified above. These reports shall be submitted as required in the General Terms and Conditions, Part I, Section A.1.c.

3. The permittee shall notify the Ohio EPA Central District Office in writing of any record showing that the downdraft air system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Central District Office within 30 days after the event occurs.

4. The permittee shall submit annual reports which specify the total emissions of particulates and organic compounds 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.

5. The permittee shall submit deviation reports which identify any record of an exceedance of the 12-month rolling emission limitation.

## V. Testing Requirements

1. Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

   Emission Limitation

   Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

   Applicable Compliance Method

   If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation

   107 tons of VOC per rolling 12-months from plastic parts coating operations combined

Applicable Compliance Method

Compliance with this rolling 12-month facility OC limit shall be determined through the permit requirements and recordkeeping contained in the terms of each individual emissions unit included in this limit. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of coatings, reducing solvents, cleanup and purge materials. The emissions, contributed to this limit by this emissions unit, shall be calculated by adding the monthly emissions, derived from emission calculations from all coatings and materials applied and cleanup material/purge used each month, in this emissions unit. The OC emissions credit shall be calculated using the OC test result(s) of each shipment along with the amount of recovered material each composite sample represents. Twelve-month rolling emissions shall be calculated by adding the current monthly emission calculations from the emissions unit to the previous 11 month's emission calculations.

3. Emission Limitation

5.67 lbs of OC per hour

Applicable Compliance Method

Until testing is completed, compliance with the hourly OC emission limit shall be determined through monthly recordkeeping of the coating, purge and cleaning material usage, the organic compound content of each material used, and documentation of the maximum coating OC content and maximum usage in any hour. Formulation data from the manufacturer or US EPA Method 24 shall be used to determine the organic compound content of the coatings, purge, and cleaning materials to be used in the calculation of emissions. Potential hourly emissions shall be calculated by multiplying the maximum OC content of any coating, purge, and cleanup materials used (lbs OC/gallon of material) times each materials' maximum usage in any hour (gallons/hr). Worst case calculations shall be documented as follows:

Uncontrolled OC emissions/hr =(4.099 lbs OC/gal of coating) x (8.62 gal/hr) = 35.33 lbs OC/hr

From oven incinerator:
OC emissions/hr = (35.33 lbs OC/hr) x (2% to oven) x (100%-90% incinerator control efficiency) = 0.07 lbs OC/hr

From RTO:
OC emissions/hr = (35.33 lbs OC/hr) x (93% concentrator capture efficiency) x (93% concentrator removal efficiency) x (100%-95% RTO control efficiency) = 1.53 lbs OC/hr

From Concentrator:

Emissions Unit ID: R204

OC emissions/hr = (35.33 lbs OC/hr) x (93% concentrator capture efficiency) x (100%-93% concentrator removal efficiency) = 2.30 lbs OC/hr

From miscellaneous losses:
OC emissions/hr = (35.33 lbs OC/hr) x (5% lost) = 1.77 lbs OC/hr

Total: 5.67 lbs/hr

4. Emission Limitation from natural gas usage

Emissions from the air supply unit (ASU), serving the primer, basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.980 lb NOx/hr;
4.292 tons NOx/yr;
0.823 lb CO/hr;
3.606 tons CO/yr;
0.074 lb PM/hr;
0.326 ton PM/yr;
0.054 lb OC/hr;
0.236 ton OC/yr;
0.006 lb $SO_2$/hr; and,
0.026 lb $SO_2$/yr.

Emissions from the concentrator B heater, serving the basecoat B (R203) and clearcoat B (R204) booths, shall not exceed:

0.260 lb NOx/hr;
1.139 tons NOx/yr;
0.218 lb CO/hr;
0.957 ton CO/yr;
0.020 lb PM/hr;
0.087 ton PM/yr;
0.014 lb OC/hr;
0.063 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.007 lb $SO_2$/yr.

Emissions from the RTO burners and it's natural gas injection system, serving the basecoat A &B (R201 and R203) and clearcoat A & B (R202 and R204) booths, shall not exceed:

0.800 lb NOx/hr;
0.892 ton NOx/yr;
0.672 lb CO/hr;

0.748 ton CO/yr;
0.061 lb PM/hr;
0.069 ton PM/yr;
0.044 lb OC/hr;
0.049 ton OC/yr;
0.005 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the incinerator burners following clearcoat A & B (R202 and R204) booths, shall not exceed:

0.200 lb NOx/hr;
0.876 ton NOx/yr;
0.168 lb CO/hr;
0.736 ton CO/yr;
0.015 lb PM/hr;
0.067 ton PM/yr;
0.011 lb OC/hr;
0.048 ton OC/yr;
0.001 lb $SO_2$/hr; and,
0.005 lb $SO_2$/yr.

Emissions from the final drying oven, following the clearcoat B (R204) booth, shall not exceed:

0.253 lb NOx/hr;
1.108 tons NOx/yr;
0.213 lb CO/hr;
0.931 ton CO/yr;
0.019 lb PM/hr;
0.084 ton PM/yr;
0.014 lb OC/hr;
0.061 ton OC/yr;
0.002 lb $SO_2$/hr; and,
0.006 lb $SO_2$/yr.

<u>Applicable Compliance Method</u>

These emission limitations were determined by multiplying the maximum natural gas usage from the air supply unit burners, the concentrator heater, the RTO burners with it's natural gas injection system, and the final drying oven A (9,800 $ft^3$/hr, 2,600 $ft^3$/hr, 8,000 $ft^3$/hr, 2,000 $ft^3$/hr, and 2,530 $ft^3$/hr respectively) by the emission factors for each pollutant (lbs of pollutant/MM $ft^3$)

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, for all but the RTO burners (6,000 $ft^3$/hr), and are divided by 2000 pounds per ton, to obtain the potential emissions of the burners. The RTO burners shall be fueled with the organic compounds, for which it was installed to control; and it is estimated that it shall require no more than 50 hours of natural gas fuel to begin it's combustion. Other than the RTO burners, these limits reflect the potential emissions of the burners, no additional compliance determination is required.

5. Emissions Limit

6.14 lbs particulate emissions/hr from overspray in the clearcoat booth B;
15.6 tons particulate emissions/yr, from overspray from the combined plastic parts coating operations, emission units R200, R201, R202, R203, and R204

Compliance Method

Compliance with the hourly and annual particulate emission (PE) limit may be determined through recordkeeping of the annual coating usage and documentation of worst case hourly emissions. The highest solids content of any coating shall be derived from formulation data contained in each manufacturer's MSDS and may be used to determine the worst-case solids content of any coating. A calculation of worst-case particulate emissions shall be calculated by multiplying the maximum solids content of any coating or coating type (clearcoats) used in this emissions unit (by % or lbs/gal) times the maximum coating usage in any hour and year, as follows:

PE /hr = (lbs solids/gal of coating) x (gal/hr) x (100%-TE) x (100%-CE) = <6.14 lb PE/hr

PE/hr from clearcoatings = (8.36 lbs/gal) x (53.94% solids) x (8.62 gal/hr) x (100%-53%) x (100%-95%) = 0.913 lb/hr

Annual emissions shall be documented as follows:

Annual PE (tons/yr) = (maximum solids/gal of coating) x (maximum gal/year) x (100%-TE) x (100%-CE) x (1 ton/2000 lbs)

Annual PE from basecoat operations and coating service parts* (tons/yr) = (8.36 lbs/gal) x (53.94% solids) x (28,098 gal/yr) x (100%-53%) x (100%-95%) x (1 ton/2000 lbs) = 1.49 tons/yr

Total POPA PE/yr = 1.91 tons from primer booth + 5.98 tons and 4.73 tons from basecoat booths A & B + 1.49 from clearcoat booth A + 1.49 from clearcoat booth B = 15.60 tons PE/yr

where:

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (53%)

CE= capture efficiency, for downdraft air system (95%)

An annual summation of the worst-case or actual particulate emissions calculations for emissions units R200, R201, R202, R203, and R204, shall demonstrate compliance with the 15.6 tons per year facility limit for these emission units.

6. Emission Limitation

5.67 lbs of OC/hr

Compliance Method

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

a. the emission testing shall be conducted within 6 months after project completion and mass production startup;

b. the emission testing shall be conducted to demonstrate compliance with the hourly emission limit and the 82% overall reduction of OC emissions from the coating operations;

c. the following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 1 for sample and velocity traverses; Method 2 for velocity and volumetric flow rates; Method 24 for the OC content of the coating; Methods 25 or 25A for destruction efficiency after the RTO; Methods 18, 25 or 25A for the OC concentration in the effluent gas leaving the concentrator; and Methods 204A through F for the capture efficiency of the concentrator. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; or, any Method of testing may be required/requested by the Administrator; and,

d. 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.

e. 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).

f. 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.

g. A comprehensive written report on the results of the emissions 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.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| R204 - Clearcoat Booth B for POPA plastic parts coating line; with natural gas oven, unit B, vented to incinerator; and booth with concentrator, unit B, and RTO control | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Cyclohexanone

TLV: 96 mg/m$^3$ (skin)

Maximum Hourly Emission Rate: 51.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1.19 mg/m$^3$

MAGLC: 2.29 mg/m$^3$

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the " Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and,

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

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

2. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

This Permit to Install (01-08167) replaces the requirements for the operations of emissions unit R303 in the PTI numbered 01-0999 issued 2/8/89, upon the startup of these coating operations.

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **4-02-016-05** | **EMISSIONS UNIT ID** | **P307** |

**EMISSIONS UNIT DESCRIPTION** **POPA Paint Effluent System, existing system**

**DATE INSTALLED** **1985 &9/00 modification**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | | | | |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 3.06 | 6.12 | 3.06 | 6.12 |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** yes

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** $

**TOXIC AIR CONTAMINANTS:**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental**

**AIR TOXICS MODELING PERFORMED*?** X **YES** ____ **NO**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

**IDENTIFY THE AIR CONTAMINANTS:** **petroleum distillate**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **4-02-016-05** | **EMISSIONS UNIT ID** | **P340** |

**EMISSIONS UNIT DESCRIPTION** **POPA Paint Effluent System, new system**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | | | | | |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 2.05 | 4.10 | 2.05 | 4.10 |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **Yes**

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACI

Emissions Unit ID: R204

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** _____ **NO**

**IDENTIFY THE AIR CONTAMINANTS:** **petroleum distillate**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **2-02-016-21** | **EMISSIONS UNIT ID** | **R200** |

**EMISSIONS UNIT DESCRIPTION** **Primer Booth for POPA plastic parts coating lines, with infrared or natural gas oven**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | 1.03 & 0.322 from NG all EUs | 1.91 & 1.21 from NG all EUs | 1.03 & 0.322 from NG all EUs | 1.91 & 1.21 from NG all EUs |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | 0.025 from NG all EUs | 0.10 from NG all EUs | 0.025 from NG all EUs | 0.10 from NG all EUs |
| Organic Compounds | Attainment | 17.44 & 0.233 from NG all EUs | 32.8 & 0.88 from NG all EUs | 17.44 & 0.233 from NG all EUs | 32.8 & 0.88 from NG all EUs |
| Nitrogen Oxides | | 4.24 from NG all EUs | 15.94 from NG all EUs | 4.24 from NG all EUs | 15.94 fromNG all EUs |
| Carbon Monoxide | | 3.56 from NG all EUs | 13.39 from NG all EUs | 3.56 from NG all EUs | 13.39 from NG all EUs |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **yes**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** _____ **NO**

**IDENTIFY THE AIR CONTAMINANTS:** Cyclohexanone, Methyl Amyl Ketone **and see list**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACI

Emissions Unit ID: R204

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **2-02-016-23** | **EMISSIONS UNIT ID** | **R201** |

**EMISSIONS UNIT DESCRIPTION** **Basecoat Booth A for POPA plastic parts coating line; with natural gas air supply, unit A; and booth with concentrator, unit A, and RTO control**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | 2.90 | 5.98 | 2.90 | 5.98 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 11.21 | 23.1 &14.4 facility POPA cleanup(all booths) | 11.21 | 23.1 & 14.4 facility POPA cleanup (all booths) |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **yes**

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$2,900,000 concentrators & RTO**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** **NO**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

**IDENTIFY THE AIR CONTAMINANTS:** Cyclohexanone, Methyl Amyl Ketone **and see list**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **4-02-016-25** | **EMISSIONS UNIT ID** | **R202** |

**EMISSIONS UNIT DESCRIPTION** **Clearcoat Booth A for POPA plastic parts coating line; with natural gas oven, unit A, vented to incinerator; and booth with concentrator, unit A, and RTO control**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | 0.91 | 1.49 | 0.91 | 1.49 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 5.67 | 9.23 | 5.67 | 9.23 |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **yes**

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$2,900,000 concentrators & RTO**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACI

Emissions Unit ID: R204

**Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** _____ **NO**

**IDENTIFY THE AIR CONTAMINANTS:** Cyclohexanone, Methyl Amyl Ketone **and see list**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **4-02-016-23** | **EMISSIONS UNIT ID** | **R203** |

**EMISSIONS UNIT DESCRIPTION** **Basecoat Booth B for POPA plastic parts coating line; with natural gas air supply, unit B; and booth with concentrator, unit B, and RTO control**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | 2.90 | 4.73 | 2.90 | 4.73 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 11.21 | 18.28 | 11.21 | 18.28 |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **yes**

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$2,900,000 concentrators & RTO**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of**

**NEW**
PTI N
FACI

Emissions Unit ID: R204

FACILITY DESCRIPTION Plastic parts coating line. CITY/TWP Marysville

**Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** _____ **NO**

**IDENTIFY THE AIR CONTAMINANTS:** Cyclohexanone, Methyl Amyl Ketone **and see list**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACI

Emissions Unit ID: R204

| | | | | | |
|---|---|---|---|---|---|
| **SIC CODE** | **3711** | **SCC CODE** | **4-02-016-25** | **EMISSIONS UNIT ID** | **R204** |

**EMISSIONS UNIT DESCRIPTION** **Clearcoat Booth B for POPA plastic parts coating line; with natural gas oven, unit B, vented to incinerator; and booth with concentrator, unit B, and RTO control**

**DATE INSTALLED** **9/00**

**EMISSIONS: (Click on bubble help for Air Quality Descriptions)**

| Pollutants | Air Quality Description | Actual Emissions Rate | | PTI Allowable | |
|---|---|---|---|---|---|
| | | Short Term Rate | Tons Per Year | Short Term Rate | Tons Per Year |
| Particulate Matter | Attainment | 0.91 | 1.49 | 0.91 | 1.49 |
| $PM_{10}$ | | | | | |
| Sulfur Dioxide | | | | | |
| Organic Compounds | Attainment | 5.67 | 9.23 | 5.67 | 9.23 |
| Nitrogen Oxides | | | | | |
| Carbon Monoxide | | | | | |
| Lead | | | | | |
| Other: Air Toxics | | | | | |

**APPLICABLE FEDERAL RULES:**

**NSPS?** **NESHAP?** **PSD?** **OFFSET POLICY?**

| WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION? |
|---|
| Enter Determination |

**IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?** **yes**

**OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?** **$2,900,000 concentrators & RTO**

**TOXIC AIR CONTAMINANTS**

**Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.**

**AIR TOXICS MODELING PERFORMED*?** **X** **YES** _____ **NO**

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08167 Facility ID: 0180000130

FACILITY NAME Honda of America Mfg Inc

FACI

Emissions Unit ID: R204

**IDENTIFY THE AIR CONTAMINANTS:** Cyclohexanone, Methyl Amyl Ketone **and see list**