

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

EFFECTIVE DATE: November 21, 2011

ISSUED TO

**REC BOAT HOLDINGS, L.L.C. - CRUISER**

State Registration Number (SRN): N1328

LOCATED AT

609 13th Street, Cadillac, Wexford County, Michigan 49601

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-N1328-2011

Expiration Date: November 21, 2016

Administratively Complete ROP Renewal Application Due Between 5/21/15 and 5/21/16

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-N1328-2011

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

---

Janis Denman, Cadillac District Supervisor

## TABLE OF CONTENTS

<b>AUTHORITY AND ENFORCEABILITY .....</b>	<b>3</b>
<b>A. GENERAL CONDITIONS.....</b>	<b>4</b>
Permit Enforceability .....	4
General Provisions.....	4
Equipment & Design .....	5
Emission Limits .....	5
Testing/Sampling .....	5
Monitoring/Recordkeeping .....	6
Certification & Reporting .....	6
Permit Shield .....	7
Revisions .....	8
Reopenings.....	8
Renewals .....	9
Stratospheric Ozone Protection .....	9
Risk Management Plan.....	9
Emission Trading .....	9
Permit To Install (PTI).....	10
<b>B. SOURCE-WIDE CONDITIONS .....</b>	<b>11</b>
<b>C. EMISSION UNIT CONDITIONS .....</b>	<b>14</b>
EMISSION UNIT SUMMARY TABLE .....	14
EULAMINATION .....	15
EUGELCOAT .....	19
EUVOC CLEANUP .....	22
EUADHESIVE .....	25
EUACETONE CLEANUP .....	28
EUGRINDCUTBOOTH .....	31
EURTM.....	33
<b>D. FLEXIBLE GROUP CONDITIONS.....</b>	<b>36</b>
FLEXIBLE GROUP SUMMARY TABLE .....	36
FGOPENMOLDING .....	37
FGMIXING .....	42
<b>E. NON-APPLICABLE REQUIREMENTS .....</b>	<b>44</b>
<b>APPENDICES .....</b>	<b>45</b>
Appendix 1. Abbreviations and Acronyms .....	45
Appendix 2. Schedule of Compliance.....	46
Appendix 3. Monitoring Requirements .....	46
Appendix 4. Recordkeeping .....	46
Appendix 5. Testing Procedures .....	47
Appendix 6. Permits to Install.....	47
Appendix 7. Emission Calculations .....	47
Appendix 8. Reporting .....	52

## **AUTHORITY AND ENFORCEABILITY**

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, or is state only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

## A. GENERAL CONDITIONS

### Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-N1328- pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

### General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. 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 conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
  - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
  - c. Inspect, at reasonable times, any of the following:
    - i. Any stationary source.
    - ii. Any emission unit.
    - iii. Any equipment, including monitoring and air pollution control equipment.
    - iv. Any work practices or operations regulated or required under the ROP.
  - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

### Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

### Emission Limits

11. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
  - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
  - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.<sup>1</sup> **(R 336.1901(a))**
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> **(R 336.1901(b))**

### Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

## Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b))**:
  - a. The date, location, time, and method of sampling or measurements.
  - b. The dates the analyses of the samples were performed.
  - c. The company or entity that performed the analyses of the samples.
  - d. The analytical techniques or methods used.
  - e. The results of the analyses.
  - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

## Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
  - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
  - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
  - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
  - a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
  - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

## Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
  - a. The applicable requirements are included and are specifically identified in the ROP.
  - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
  - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
  - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
  - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
  - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
  - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
  - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

## Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

## Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
  - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
  - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
  - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

## Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

## Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

## Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, Part 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR, Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
- June 21, 1999,
  - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
  - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c). **(40 CFR, Part 68)**

## Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

### Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. <sup>2</sup> **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. <sup>2</sup> **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. <sup>2</sup> **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. <sup>2</sup> **(R 336.1201(4))**

#### **Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## **B. SOURCE-WIDE CONDITIONS**

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

## SOURCE-WIDE CONDITIONS

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	5,267.0 pounds/day <sup>2</sup>	Calendar day	NA	Condition VI.1	R 336.1205(3)
2. VOC	<225 tpy <sup>2</sup>	12 month rolling time period, as determined at the end of each calendar month	NA	Condition VI.1	R 336.1205(3) R 336.1225 R 336.1901

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. NA

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall maintain the following information. All records shall be made available by the 15<sup>th</sup> day of each succeeding month in a format acceptable to the AQD District Supervisor.<sup>2</sup> (R 336.1205(3), R 336.1225, R 336.1901, R 336.1213(3)(b))
  - a. Gallons or pounds of each material used on a daily basis;
  - b. Where applicable, gallons or pounds of each material reclaimed on a daily basis;
  - c. VOC content (weight percent) of each material determined by manufacturer's formulation data or other method as approved by the AQD District Supervisor;
  - d. VOC emission calculations determining the daily emissions in pounds per calendar day;
  - e. VOC emission calculations determining the monthly emissions in tons per calendar month;
  - f. VOC emission calculations determining the annual emission rate in tons per 12 month rolling time period, as determined at the end of each calendar month.

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

1. NA

## **IX. OTHER REQUIREMENT(S)**

1. If the permittee manufactures fiberglass reinforced plastic (FRP) composite small parts at this stationary source, these FRP composite small parts must be used on the fiberglass boats that are manufactured at this stationary source. If the FRP composite small parts manufactured at this stationary source are used on fiberglass boats manufactured outside of this stationary source, then all operations associated with the manufacture of the FRP composite small parts will be subject to 40 CFR, Part 63, Subpart WWWW, except as described in 40 CFR 63.5787(d). The permittee shall maintain written documentation identifying where the FRP composite small parts were used.<sup>2</sup> **(40 CFR 63.5787(b), 40 CFR 63.5787(c), 40 CFR 63.5787(d))**

### **Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

### C. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

#### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EULAMINATION	Cruiser Plant resin lamination.	1/4/1999 3/26/2010	FGOPENMOLDING
EUGELCOAT	Cruiser Plant gel coat application.	10/1/1986 10/5/2010	FGOPENMOLDING
EUVOCCLEANUP	Cruiser Plant VOC-based cleanup solvent(s)	3/16/2004	NA
EUADHESIVE	Cruiser Plant adhesive application.	6/1/1988	NA
EURESINMIXING	Cruiser Plant resin mixing operations.	7/7/2006	FGMIXING
EUGELCOATMIXING	Cruiser Plant gel coat mixing operations.	7/7/2006	FGMIXING
EUACETONECLEANUP	Cruiser Plant cleanup operations utilizing acetone.	10/1/1988	NA
EUGRINDCUTBOOTH	Cruiser Plant 30' by 60' grinding/cutout booth. Particulate emissions will remain in-plant.	7/7/2006	NA
EURTM	Resin transfer molding (RTM) process for small parts production.	3/26/2010	NA

**EULAMINATION  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Fiberglass lamination of boat parts. This process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc.

**Flexible Group ID:** FGOPENMOLDING

**POLLUTION CONTROL EQUIPMENT**

Filter (fabric mat or panel)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC (including styrene and vinyl toluene)	127.3 pph <sup>2</sup>	Calendar day average	EULAMINATION	Condition VI.7	R 336.1205 R 336.1225 R 336.1702(c)
2. VOC (including styrene and vinyl toluene)	158.2 tpy <sup>2</sup>	12 month rolling time period, as determined at the end of each calendar month	EULAMINATION	Condition VI.8	R 336.1205 R 336.1225 R 336.1702(c)
3. VOC (including styrene and vinyl toluene)	0.0385 pound per pound of resin applied <sup>2</sup>	From the use of production resins	EULAMINATION	Condition VI.2	R 336.1205 R 336.1225 R 336.1702(c)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Resin (including tooling resins and resins containing vinyl toluene)	45,489 pounds/day <sup>2</sup>	Calendar day	EULAMINATION	Condition VI.5	R 336.1205 R 336.1225 R 336.1702(c)
2. Resin containing up to 12 percent, by weight, of vinyl toluene	3,600 pounds/day <sup>1</sup>	Calendar day	EULAMINATION	Condition VI.6	R 336.1225

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
3. Production resin maximum styrene monomer content	35%, by weight <sup>2</sup>	Instantaneous	EULAMINATION	Condition VI.1	R 336.1205 R 336.1225 R 336.1702(c)
4. Production resin maximum vinyl toluene content	12% by weight <sup>2</sup>	Instantaneous	EULAMINATION	Condition VI.1	R 336.1205 R 336.1225 R 336.1702(c)
5. Tooling resin maximum styrene monomer content	50%, by weight <sup>2</sup>	Instantaneous	EULAMINATION	Condition VI.1	R 336.1205 R 336.1225 R 336.1702(c)

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- All waste resins shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable rules and regulations.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(c))
- The permittee shall use non-atomized applicators or technology with equivalent or lower styrene emission rates for a minimum of 50 percent of the resin usage.<sup>2</sup> (R 336.1225, R 336.1702(c))
- All production resins which contain vinyl toluene shall be applied using non-atomized application equipment (flowcoaters).<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))

### IV. DESIGN/EQUIPMENT PARAMETER(S)

- NA

### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- NA

### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall maintain records of the chemical composition of each shipment of the production and tooling resins including the weight percent of each component (specifically styrene and vinyl toluene) using manufacturer's formulation data or other method as approved by the AQD District Supervisor.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1213(3)(b))
- The permittee shall maintain separate records, for each production resin used, of the pounds of VOC emitted per pound of material applied using the equation in Appendix 7.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a), R 336.1213(3)(b))
- The permittee shall maintain records of the appropriate emission factor, application method, applicable monomer contents, and dated version of the UEF table used for each resin.<sup>1</sup> (R 336.1225, R 336.1213(3)(b))
- The permittee shall maintain calendar day records of the hours of operation.<sup>1</sup> (R 336.1225, R 336.1213(3)(b))

5. The permittee shall maintain records determining the total daily resin usage rate in pounds per calendar day.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
6. The permittee shall maintain separate records determining the total daily usage rate of production resins which contain vinyl toluene.<sup>1</sup> **(R 336.1225, R 336.1213(3)(b))**
7. The permittee shall calculate and maintain daily records of the actual VOC (including styrene and vinyl toluene) emission rates in pounds per hour, using the emission factors and equations listed in Appendix 7, in a method acceptable to the District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1213(3)(b))**
8. The permittee shall calculate and maintain monthly records of the actual VOC (including styrene and vinyl toluene) emission rates in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month using the emission factors and equations listed in Appendix 7.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702, R 336.1213(3)(b))**
9. The permittee shall maintain monthly records of non-atomized applicator usage, in a manner acceptable to the District Supervisor, demonstrating that 50 percent of total resin and all production resins containing vinyl toluene were applied by the use of non-atomized applicators.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1213(3)(b))**

See Appendix 7

## VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall prepare monthly reports of VOC (including styrene and vinyl toluene) emission rate calculations (hourly, based upon a calendar day average, and 12 month rolling time period), hours of operation, and daily resin usage, in a format acceptable to the AQD District Supervisor. The monthly reports shall be submitted quarterly to the AQD District Supervisor unless otherwise specified in any recordkeeping, reporting or notification condition. The reports shall be postmarked or received by the appropriate AQD District Office no later than 30 days following the end of each calendar quarter.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(c), R 336.1213(3))**

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUGELCOAT  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Gel coat application to fiberglass boat parts. The process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc.

**Flexible Group ID:** FGOPENMOLDING

**POLLUTION CONTROL EQUIPMENT**

Filter (fabric mat or panel)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC (including styrene)	98.9 pph <sup>2</sup>	Calendar day average	EUGELCOAT	Condition VI.6	R 336.1225 R 336.1702(c)
2. VOC (including styrene)	134.4 tpy <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUGELCOAT	Condition VI.7	R 336.1225 R 336.1702(c)
3. Styrene	69.8 pph <sup>1</sup>	Calendar day average	EUGELCOAT	Condition VI.6	R 336.1225 R 336.1901
4. Styrene	94.8 tpy <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUGELCOAT	Condition VI.7	R 336.1205 R 336.1225 R 336.1702(c)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Gel coat	10,000 pounds/day <sup>2</sup>	Calendar day	EUGELCOAT	Condition VI.1	R 336.1225 R 336.1702(c)
2. Gel coat maximum styrene monomer content	30.7%, by weight <sup>2</sup>	Monthly average	EUGELCOAT	Condition VI.2	R 336.1205 R 336.1225 R 336.1702(c)

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- All waste gel coats shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable rules and regulations.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(c))
- The permittee shall not operate EUGELCOAT unless all exhaust filters are in place and operating properly. (R 336.1910)

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. NA

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain daily, monthly and 12-month rolling time period (as determined at the end of each calendar month) gel coat usage records consisting of calculations determining the daily usage rate of each gel coat in pounds per calendar day, the monthly gel coat usage rate in pounds per calendar month, and the annual gel coat usage rate in pounds per 12-month rolling time period.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each shipment of gel coat, including the weight percent of each component using manufacturer's formulation data or other method as approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
3. The permittee shall maintain records of the appropriate emission factor (specify the application method, applicable monomer contents, and dated version of the UEF table used) for each gel coat used.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
4. The permittee shall maintain records of the calendar day hours of operation.<sup>1</sup> **(R 336.1225, R 336.1213(3)(b))**
5. The permittee shall calculate and maintain daily records of the actual styrene and VOC (including styrene) emission rates in pounds per hour using the equation listed in Appendix 7.<sup>1</sup> **(R 336.1225, R 336.1213(3)(b))**
6. The permittee shall calculate and maintain monthly records of the actual styrene and VOC (including styrene) emission rates in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month using the equations listed in Appendix 7.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702, R 336.1213(3)(b))**

**See Appendix 7**

#### **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. The permittee shall prepare monthly reports of styrene and VOC (including styrene) emission rate calculations (hourly, based upon a calendar day average, and 12-month rolling time period), hours of operation, and daily gelcoat usage (as specified in Section VI), in a format acceptable to the District Supervisor. The monthly reports shall be submitted quarterly to the District Supervisor, unless otherwise specified in any recordkeeping, reporting or notification condition. The reports shall be postmarked or received by the appropriate AQD District Office no later than 30 days following the end of each calendar quarter.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(c), R 336.1213(3))

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUVOCLEANUP  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

VOC based clean-up solvent usage.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Filter (fabric mat or panel)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC based cleanup solvents	937,500 pounds/year <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUVOCLEANUP	Condition VI.1	<b>R 336.1225 R 336.1702(a)</b>
2. Maximum organic HAP content of cleaning solvent used for routine flushing of resin and gel coat application equipment	5%, by weight	Instantaneous	EUVOCLEANUP	Condition VI.3	<b>40 CFR 63.5734(a)</b>

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall recover and reclaim a minimum of 48 percent, by weight, of all VOC-based cleanup solvents used in EUVOCLEANUP.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
2. All waste cleanup solvents, rags/wipedown cloths, etc. shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable rules and regulations.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
3. The permittee shall store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times except when equipment to be cleaned is being placed in or removed from the container. **(40 CFR 63.5734(b))**

4. On containers with a capacity greater than 7.6 liters (2 gallons), the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. **(40 CFR 63.5734(b))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. NA

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain the following information in a format acceptable to the AQD District Supervisor on a monthly basis for EUVOC CLEANUP:<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
  - a. The identity of each cleanup solvent used;
  - b. The VOC content of each cleanup solvent used;
  - c. The amount (in gallons or pounds) of each cleanup solvent used;
  - d. The amount (in gallons or pounds) of each cleanup solvent reclaimed;
  - e. Calculations determining the percent by weight of all VOC-based cleanup solvents recovered and reclaimed per calendar month;
  - f. Calculations determining the total monthly cleanup solvent usage rate in pounds per calendar month, and the annual cleanup solvent usage rate in pounds per 12 month rolling time period as determined at the end of each calendar month.
2. The permittee shall visually inspect any containers holding organic HAP containing solvents used for removing cured resin and gel coat at least once per month. The inspection should ensure that the containers have covers with no visible gaps. The permittee shall maintain records of the monthly inspections and any repairs or corrective actions taken. **(40 CFR 63.5737(c), R 336.1213(3)(b))**
3. The permittee shall determine and record the organic HAP content of the cleaning solvents referred to in the Material Limits Table and subject to the standards specified in 40 CFR 63.5734 using the methods in 40 CFR 63.5758. Documentation from the solvent manufacturer or supplier or a measurement of the organic HAP content of the cleaning solvent as originally obtained from the solvent supplier may be used to demonstrate compliance with the resin and gel coat application equipment cleaning standards for cleaning solvents that are recycled on-site. **(40 CFR 63.5737(a), 40 CFR 63.5737(b), R 336.1213(3)(b))**

#### **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and shall be submitted quarterly to the AQD District Supervisor, unless otherwise specified in any recordkeeping, reporting, or notification conditions.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(c))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. This process is subject to the requirements of 40 CFR 63 Subpart VVVV – National Emission Standards for Boat Manufacturing and Subpart A – General Provisions. The applicable requirements include but are not limited to those identified in this table. Should any discrepancies exist between the 40 CFR 63 requirements and this table, the requirements of the Standard shall take precedence. **(40 CFR 63 Subpart VVVV)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUADHESIVE  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of adhesives during the boat manufacturing process.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC and acetone (combined)	484 pounds/day <sup>2</sup>	Calendar day	EUADHESIVE	Condition VI.3	R 336.1205 R 336.1225 R 336.1702(c)
2. VOC and acetone (combined)	61.0 tpy <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUADHESIVE	Condition VI.3	R 336.1205 R 336.1225 R 336.1702(c)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Carpet and fabric adhesives maximum organic HAP content	5%, by weight	Instantaneous	EUADHESIVE	Condition VI.4	40 CFR 63.5740(a)

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of daily, monthly and 12-month rolling time period adhesive usage and hours of operation in a manner acceptable to the District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
2. The permittee shall maintain monthly records of adhesive VOC and acetone content using manufacturer's formulation data or other method as approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
3. The permittee shall maintain records of daily, monthly, and 12-month rolling time period VOC and acetone (combined) emissions.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
4. The permittee shall use the methods specified in 40 CFR 63.5758 to determine the organic HAP contents of carpet and fabric adhesives. **(40 CFR 63.5740(b))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall prepare monthly reports of daily adhesive usage rate, VOC and acetone content, and VOC and acetone emissions (pounds per calendar day and tons per 12-month rolling time period) in a format acceptable to the AQD District Supervisor. The reports shall be submitted quarterly to the District Supervisor, unless otherwise specified in any recordkeeping, reporting or notification condition.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUACETONECLEANUP  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Acetone based cleanup solvent usage

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Acetone	125 tpy <sup>1</sup>	12 month rolling time period as determined at the end of each calendar month	EUACETONECLEANUP	Condition VI.4	R 336.1225

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall recover and reclaim a minimum of 48 percent, by weight, of the acetone used.<sup>1</sup> (R 336.1224, R 336.1225)
2. All waste cleanup solvents shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable rules and regulations.<sup>1</sup> (R 336.1224, R 336.1225)

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall use the recordkeeping format in Appendix 4 to maintain a monthly and 12 month rolling time period record of the amount of acetone used, recovered and reclaimed.<sup>1</sup> (R 336.1224, R 336.1225, R 336.1213(3)(b))

2. The permittee shall maintain records for each calendar month of the amount, in pounds, of acetone purchased and the amount, in pounds, sent off-site for either recycling or disposal.<sup>1</sup> **(R 336.1224, R 336.1225, R 336.1213(3)(b))**
3. The permittee shall maintain monthly and 12 month rolling time period records of the amount of acetone lost to the atmosphere by using the mass balance method listed in Appendix 4.<sup>1</sup> **(R 336.1224, R 336.1225, R 336.1213(3)(b))**

See Appendix 4

## VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall report the total amount, in pounds, of acetone lost to the atmosphere for each calendar month and 12-month rolling time period to the AQD District Supervisor. Reports shall be submitted on a quarterly basis, unless otherwise specified in any recordkeeping, reporting or notification condition.<sup>1</sup> **(R 336.1224, R 336.1225, R 336.1213(3))**

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

- <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
- <sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUGRINDCUTBOOTH  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

30 foot by 60 foot Grinding/Cutout Booth.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

Dust collection system

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall maintain the pressure drop across dust collection system filters between 2.20 and 3.20 inches W.G.. (R 336.1910)

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EUCUTGRINDBOOTH unless the dust collection system is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1331, R 336.1901, R 336.1910)
2. The permittee shall not operate the cutting and/or grinding operations associated with EUCUTGRINDBOOTH unless a gauge, which measures the pressure drop across the filters associated with the dust collection system is installed, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910)

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall continuously monitor the pressure drop across the dust collection system filters and record the pressure drop once per week. **(R 336.1910, R 336.1213(3)(b))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

1. The exhaust gases from EUCUTGRINDBOOTH shall not be discharged to the ambient air at any time.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1901)**

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EURTM  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Resin transfer molding operations.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC (including styrene)	12.6 tpy <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EURTM	Condition VI.1	R 336.1225 R 336.1702(a)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Resin maximum styrene content	47%, by weight <sup>1</sup>	Instantaneous	EURTM	Condition VI.2	R 336.1225
2. Resin maximum VOC content	50%, by weight <sup>2</sup>	Instantaneous	EURTM	Condition VI.2	R 336.1205 R 336.1225 R 336.1702(a)
3. Adhesive/tackifier maximum styrene content	0.6%, by weight <sup>1</sup>	Instantaneous	EURTM	Condition VI.2	R 336.1225
4. Adhesive/tackifier maximum VOC content	46%, by weight <sup>2</sup>	Instantaneous	EURTM	Condition VI.2	R 336.1205 R 336.1225 R 336.1702(a)

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain the following information on a monthly basis for EURTM in a manner acceptable to the AQD District Supervisor:<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1213(3)(b))**
  - a. The amount of resin material used;
  - b. The amount of adhesive/tackifier used;
  - c. The styrene content of each resin and adhesive/tackifier used;
  - d. The VOC content of each resin and adhesive/tackifier used;
  - e. VOC emission calculations determining the actual VOC emission rate (including styrene) in tons per calendar month, and the annual VOC emission rate (including styrene) in tons per 12 month rolling time period as determined at the end of each calendar month using the emission factor and equation listed in Appendix 7.
2. The permittee shall maintain a separate record of the styrene monomer content and total VOC content for each shipment of resin and adhesive/tackifier received. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or other method as approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1213(3)(b))**

See Appendix 7

## VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R336.2804, 40 CFR 52.21(c) and (d)

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

### D. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

#### FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGOPENMOLDING	All open molding operations utilizing gel coat and resin for the purpose of compliance with 40 CFR 63 Subpart VVVV.	EULAMINATION EUGELCOAT
FGMIXING	All resin and gel coat mixing operations.	EURESINMXING EUGELCOATMIXING

**FGOPENMOLDING  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

All open molding operations utilizing production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat including the application of gel coat or skin coat layers that are applied before lamination by closed molding for the purpose of compliance with 40 CFR 63 Subpart VVVV.

**Emission Units:** EULAMINATION, EUGELCOAT

**POLLUTION CONTROL EQUIPMENT**

Filter (fabric mat or panel)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP for all open molding operations utilizing production resin, tooling resin, filled resins, pigmented gel coat, clear gel coat, and tooling gel coat	Kilograms/year (See Appendix 7)	12 month rolling average	FGOPENMOLDING	Conditions VI.2 and VI.8	<b>40 CFR 63.5698(b)</b>

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP content of production resin	28%, based upon a weighted average <sup>a</sup>	Atomized application	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
2. Organic HAP content of production resin	35%, based upon a weighted average <sup>a</sup>	Non-atomized application	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
3. Organic HAP content of pigmented gel coat	33%, based upon a weighted average <sup>a</sup>	NA	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. Organic HAP content of clear gel coat	48%, based upon a weighted average <sup>a</sup>	NA	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
5. Organic HAP content of tooling resin	30%, based upon a weighted average <sup>a</sup>	Atomized application	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
6. Organic HAP content of tooling resin	39%, based upon a weighted average <sup>a</sup>	Non-atomized application	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
7. Organic HAP content of tooling gel coat	40%, based upon a weighted average <sup>a</sup>	NA	FGOPENMOLDING	Condition VI.11	<b>40 CFR 63.5701(b)</b>
8. Organic HAP content of filled production resin	46 kilograms per megagram of filled resin applied <sup>a</sup>	NA	FGOPENMOLDING	Condition VI.9	<b>40 CFR 63.5714(b)</b>
9. Organic HAP content of filled tooling resin	54 kilograms per megagram of filled tooling resin applied <sup>a</sup>	NA	FGOPENMOLDING	Condition VI.9	<b>40 CFR 63.5714(c)</b>

<sup>a</sup> The material limits are applicable when using the compliant materials option (40 CFR 63.5701(b)) to demonstrate compliance with the emission limit contained in Condition I.1.

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. NA

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. NA

### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

#### **Emissions Averaging**

1. When using Emissions Averaging to comply with the organic HAP limit in Condition I.1 above, the permittee must prepare an implementation plan as specified in 40 CFR 63.5707. **(40 CFR 63.5707, R 336.1213(3)(b))**
2. When using Emissions Averaging to demonstrate compliance with the organic HAP limit in Condition I.1 above, the permittee must calculate the emissions on a 12 month rolling average using the equation listed in Appendix 7 at the end of every month. **(40 CFR 63.5710(b), 40 CFR 63.5714(d), R 336.1213(3)(b))**

3. The permittee shall use the equation listed in Appendix 7 at the end of each month to determine the weighted-average MACT model point value for each open molding resin and gel coat operation included in the average required above. **(40 CFR 63.5710(c), R 336.1213(3)(b))**
4. The permittee shall use the equations listed in Appendix 7 to determine the MACT model point value for each resin and gel coat used in each operation. **(40 CFR 63.5710(d), R 336.1213(3)(b))**
5. The permittee shall maintain records of the organic HAP content of each resin and gel coat. **(40 CFR 63.5704(a)(3)(i), R 336.1213(3)(b))**
6. The permittee shall maintain records of the amount of resin and gel coat used per month. **(40 CFR 63.5704(a)(3)(ii), R 336.1213(3)(b))**
7. The permittee shall maintain records of the application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology. **(40 CFR 63.5704(a)(3)(iii), R 336.1213(3)(b))**

#### **Compliant Materials**

8. When using Compliant Materials to comply with the organic HAP limit in Condition I.1 above, the permittee may use the equation listed in Appendix 7 to calculate the weighted average organic HAP content at the end of every month for all resins and gel coats used in each operation in the past 12 months. If all resins and gel coats used have organic HAP contents no greater than the applicable organic HAP content limits, this calculation is not necessary to demonstrate compliance. **(40 CFR 63.5713, R 336.1213(3)(b))**
9. If filled resins are used, the equation listed in Appendix 7 must be used to demonstrate compliance for the filled material on an as-applied basis. **(40 CFR 63.5714, R 336.1213(3)(b))**
10. The permittee shall use the methods specified in 40 CFR 63.5758 to determine the organic HAP contents of resins and gel coats. **(40 CFR 63.5704(b)(1), R 336.1213(3)(b))**
11. The permittee shall use the equation listed in Appendix 7 to show that the weighted-average organic HAP content of each resin and gel coat does not exceed the limits specified in Conditions II.1 through II.7. **(40 CFR 63.5704(b)(2), 40 CFR 63.5713(c), R 336.1213(3)(b))**
12. The permittee shall maintain records of the HAP content of each resin and gel coat. **(40 CFR 63.5704(b)(3)(i), R 336.1213(3)(b))**
13. The permittee shall maintain records of the application method for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology. **(40 CFR 63.5704(b)(3)(ii), R 336.1213(3)(b))**
14. The permittee shall maintain records of the amount of resins and gel coats used per month. This record is not required for an operation if all resins and gel coats used for that operation comply with the organic HAP content requirements. **(40 CFR 63.5704(b)(3)(iii), R 336.1213(3)(b))**
15. The permittee shall maintain records of the calculations performed in condition VI.8, if required, to demonstrate compliance based on weighed-average organic HAP content as described in 40 CFR 63.5713. **(40 CFR 63.5704(b)(3)(iv), R 336.1213(3)(b))**

#### **General requirements**

16. The permittee shall maintain a copy of each notification and report submitted pursuant to 40 CFR 63 Subpart VVVV and shall maintain all documentation supporting any notification or report. **(40 CFR 63.5767(a) and (b), R 336.1213(3)(b))**

17. The permittee shall maintain records of the total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted average organic HAP contents for each operation, expressed as weight percent. **(40 CFR 63.5767(c)(3), R 336.1213(3)(b))**
18. For open molding production resin and tooling resin, the permittee shall record the amounts of each applied by atomized and nonatomized methods. **(40 CFR 63.5767(c)(3), R 336.1213(3)(b))**

See Appendix 7

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Semiannual reporting of compliance as required in 40 CFR 63.5764. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR 63.5764, R 336.1213)**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV001B1	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SV001B2	49 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SV001B3	39 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SV001B4	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
5. SV001B5	42 <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENT(S)**

1. This process is subject to the requirements of 40 CFR 63 Subpart VVVV-National Emission Standards for Boat Manufacturing and Subpart A-General Provisions. The applicable requirements include but are not limited to those identified in this table. Should any discrepancies exist between the 40 CFR 63 requirements and this table, the requirements of the Standard shall take precedence. **(40 CFR, Part 63, Subpart VVVV)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGMIXING  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

All resin and gelcoat mixing operations as defined as any operation in which resin or gel coat, including the mixing of putties and polyputties, is combined with additives that include, but are not limited to, fillers, promoters, or catalysts.

**Emission Unit:** EURESINMIXING, EUGELCOATMIXING

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NA	NA	NA	NA	NA	NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and poly putties, must have a cover with no visible gaps in place at all times except when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container. **(40 CFR 63.5731(a))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall visually inspect all mixing containers subject to 40 CFR 63.5731 at least once per month. The inspection should ensure that all containers have covers with no visible gaps between the cover and the container, or between the cover and equipment passing through the cover. **(40 CFR 63.5731(c), R 336.1213(3)(b))**

- The permittee shall maintain records of which mixing containers are subject to 40 CFR 63.5731 and the results of the inspections, including a description of any repairs or corrective actions taken. **(40 CFR 63.5731(d), R 336.1213(3)(b))**

**VII. REPORTING**

- Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

- This process is subject to the requirements of 40 CFR 63 Subpart VVVV-National Emission Standards for Boat Manufacturing and Subpart A-General Provisions. The applicable requirements include but are not limited to those identified in this table. Should any discrepancies exist between the 40 CFR 63 requirements and this table, the requirements of the Standard shall take precedence. **(40 CFR, Part 63, Subpart VVVV)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).  
<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

ROP No: MI-ROP-N1328-2011  
Expiration Date: November 21, 2016  
PTI No: MI-PTI-N1328-2011

## **E. NON-APPLICABLE REQUIREMENTS**

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

## APPENDICES

### Appendix 1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
GC	General Condition	psig	Pounds per square inch gauge
gr	Grains	PeTE	Permanent Total Enclosure
HAP	Hazardous Air Pollutant	PTI	Permit to Install
Hg	Mercury	RACT	Reasonable Available Control Technology
hr	Hour	ROP	Renewable Operating Permit
HP	Horsepower	SC	Special Condition
H <sub>2</sub> S	Hydrogen Sulfide	scf	Standard cubic feet
HVLP	High Volume Low Pressure *	sec	Seconds
ID	Identification (Number)	SCR	Selective Catalytic Reduction
IRSL	Initial Risk Screening Level	SO <sub>2</sub>	Sulfur Dioxide
ITSL	Initial Threshold Screening Level	SRN	State Registration Number
LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
lb	Pound	Temp	Temperature
m	Meter	THC	Total Hydrocarbons
MACT	Maximum Achievable Control Technology	tpy	Tons per year
MAERS	Michigan Air Emissions Reporting System	µg	Microgram
MAP	Malfunction Abatement Plan	VE	Visible Emissions
MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
mg	Milligram	yr	Year
mm	Millimeter		

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

**Appendix 2. Schedule of Compliance**

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

**Appendix 3. Monitoring Requirements**

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

**Appendix 4. Recordkeeping**

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EUACETONECLEANUP. Alternative formats must be approved by the AQD District Supervisor.

**Cruiser Plant  
 Monthly Summary of Acetone Usage  
 MONTH/YEAR \_\_\_\_\_**

**ACETONE (lbs.)**

Beginning Inventory		+
Purchases		+
Received from Main		+
Acetone Reclaimed		+
Shipped to Main		-
Ending Inventory		-
Usage		=

**ACETONE STILL BOTTOMS (lbs.)**

Beginning Inventory		-
Disposal		+
Ending Inventory		+
Still Bottoms Generated		=
Still Bottoms Generated x 0.312=		X
	Acetone in still bottoms generated	

**DIRTY ACETONE (lbs.)**

Beginning Inventory		-
Ending Inventory		+
Acetone for Reclamation		+
Acetone for Disposal		+
Accumulation		=
Accumulation x 0.95=		X
	Accumulation of Acetone in Dirty Tank	

**EVAPORATIVE LOSS (lbs.)**

Acetone Usage		+
Acetone Still Bottoms Generated		-
Acetone Accumulation In Dirty Tank		-
Evaporative Loss		=
% Acetone Recovered (Accumulation of acetone in dirty tank/Acetone usage)		

x 100		
%Acetone Reclaimed (Acetone Reclaimed/Acetone for Reclamation) x 100		

**Note:** Reclaim includes all acetone captured and recycled on site and all acetone sent off site for recycle or disposal.

### Appendix 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

### Appendix 6. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. MI-ROP-N1328-2006a. This includes any PTI that were incorporated into the Source-Wide PTI No MI-PTI-N1328-2006a through amendments or modifications and any PTI that remained off-permit until this ROP renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
196-10	PTI No. 196-10 was issued to increase the daily gel coat usage limit to 10,000 pounds in EUGELCOAT.	EUGELCOAT
MI-PTI-N1328-2006a	Source-wide permit to install.	All emission units

### Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EULAMINATION, EUGELCOAT, EURTM and FGOPENMOLDING.

#### 1. EULAMINATION

- a. The permittee shall use the following equation for calculating the VOC emissions (including styrene and vinyl toluene), in pounds per hour based on a calendar day average.

$$VOC = \frac{\sum_{i=1}^n (MR_i)(REF_i) + (MR_i)(0.07)(VT_i) + (M_i)(EF_i)}{\text{hours of operation per day}}$$

Where:

VOC = VOC emissions (including styrene and vinyl toluene), pounds per hour, based on a calendar day average;

MR<sub>i</sub> = Mass of resin "i" used during a calendar day, pounds;

REF<sub>i</sub> = Emission factor of resin "i" derived from the Unified Emission Factor for Open Molding of Composites (UEF) Table dated July 23, 2001, or later version which has received prior approval from the AQD District Supervisor;

VT<sub>i</sub> = Weight percent of vinyl toluene in resin "i"

$M_i$  = Mass of other material "i" used during a calendar day, pounds  
 $EF_i$  = Emission factor of other material "i" derived from the UEF Table;  
 $n$  = number of different resins and other materials used during a calendar day.

- b. The permittee shall use the following equation for calculating the VOC emissions (including styrene and vinyl toluene), in tons per year based on a 12 month rolling time period:

$$VOC = \sum_{i=1}^{12} VOC_i$$

Where:

VOC = VOC emissions (including styrene and vinyl toluene), tons per year, based on a 12 month rolling time period;

$VOC_i$  = VOC emissions (including styrene and vinyl toluene), tons per month.

- c. The permittee shall use the following equation to calculate the pound of VOC emissions per pound of each resin applied for the purposes of demonstrating compliance with the limit contained in Condition I.3 of EULAMINATION:

$$VOC = (\%S \times 0.11) + (\%VT \times 0.07)$$

Where:

VOC = VOC emissions, pounds per pound of resin applied;

%S = Percent styrene content, by weight, contained in each resin

%VT = Percent vinyl toluene, by weight, contained in each resin.

## 2. EUGELCOAT

- a. The permittee shall use the following equation to calculate the VOC (including styrene) emissions in pounds per hour, based on a calendar day average:

$$VOC = \frac{\sum_{i=1}^n (M_i)(STY_i) + (M_i)(MMA_i)}{T}$$

Where;

VOC = VOC emissions (including styrene), pounds per hour based on a calendar day average;

$M_i$  = Mass of gel coat "i" used during a calendar day, pounds;

$STY_i$  = Styrene emission factor of gel coat "i" derived from the UEF Table;

$MMA_i$  = MMA emission factor of gel coat "i" derived from the UEF Table;

T = Hours of operation per calendar day.

- b. The permittee shall use the following equation to calculate the VOC (including styrene) emissions in tons per year based on a 12 month rolling time period:

$$VOC = \sum_{i=1}^{12} VOC_i$$

Where:

VOC = VOC emissions (including styrene), tons per year, based on a 12 month rolling time period;

$VOC_i$  = VOC emissions (including styrene), tons per month.

- c. The permittee shall use the following equation to calculate the styrene emissions in pounds per hour, based on a calendar day average:

$$\text{Styrene} = \frac{\sum_{i=1}^n (M_i)(\text{STY}_i)}{T}$$

Where:

Styrene = Styrene emissions in pounds per hour, based on a calendar day average;

$M_i$  = Mass of gel coat "i" used during a calendar day, pounds;

$\text{STY}_i$  = Styrene emission factor of gel coat "i" derived from the UEF Table;

T = Hours of operation per calendar day.

- d. The permittee shall use the following equation to calculate the styrene emissions in tons per year based on a 12 month rolling time period:

$$\text{Styrene} = \sum_{i=1}^{12} \text{Styrene}_i$$

Where:

Styrene = Styrene emissions, tons per year, based on a 12 month rolling time period;

$\text{Styrene}_i$  = Styrene emissions, tons per month.

### 3. EURTM

- a. The permittee shall use the following equation to calculate the ton of VOC (including styrene) emissions per month:

$$E = \frac{\sum_{i=1}^n (0.01)(\% \text{VOC}_i)(M_i)}{2000}$$

Where:

E = VOC (including styrene) emissions, tons per month

$\% \text{VOC}_i$  = Percent VOC of each resin, expressed as a decimal;

$M_i$  = Mass of each resin used per month, pounds;

n = Number of different resins used.

- b. The permittee shall use the following equation to calculate the tons of VOC (including styrene) emissions per 12 month rolling time period:

$$E_{\text{VOC}} = \sum_{i=1}^{12} E_i$$

Where:

$E_{\text{VOC}}$  = VOC (including styrene) emissions, tons per 12 month rolling time period;

$E_i$  = Monthly VOC (including styrene) emissions, tons per month.

#### 4. FGOPENMOLDING

- a. When using Emissions Averaging, the permittee shall use the following equation to calculate the organic HAP emissions limit, based on a 12 month rolling average:

$$\text{HAP limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

Where:

HAP limit = total allowable organic HAP (kilograms) that can be emitted from the open molding operations;

$M_R$  = mass of production resin used in the past 12 months (megagrams), excluding any materials exempt pursuant to 40 CFR 63.5698(d);

$M_{PG}$  = mass of pigmented gel coat used in the past 12 months (megagrams), excluding any materials exempt pursuant to 40 CFR 63.5698(d);

$M_{CG}$  = mass of clear gel coat used in the past 12 months (megagrams), excluding any materials exempt pursuant to 40 CFR 63.5698(d);

$M_{TR}$  = mass of tooling resin used in the past 12 months (megagrams), excluding any materials exempt pursuant to 40 CFR 63.5698(d);

$M_{TG}$  = mass of tooling gel coat used in the past 12 months (megagrams), excluding any materials exempt pursuant to 40 CFR 63.5698(d);

- b. When using Emissions Averaging, the permittee shall use the following equation to calculate the HAPs emissions, based on a 12 month rolling average:

$$\text{HAP emissions} = (PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

Where:

HAP emissions = Organic HAP emissions calculated using MACT model point values for each operation included in the average, kilograms;

$PV_R$  = Weighted average MACT model point value for production resin used in the past 12 months, kilograms per megagram;

$M_R$  = Mass of production resin used in the past 12 months, megagrams;

$PV_{PG}$  = Weighted average MACT model point value for pigmented gel coat used in the past 12 months, kilograms per megagram;

$M_{PG}$  = Mass of pigmented gel coat used in the past 12 months, megagrams;

$PV_{CG}$  = Weighted average MACT model point value for clear gel coat used in the past 12 months, kilograms per megagram;

$M_{CG}$  = Mass of clear gel coat used in the past 12 months, megagrams;

$PV_{TR}$  = Weighted average MACT model point value for tooling resin used in the past 12 months, kilograms per megagram;

$M_{TR}$  = Mass of tooling resin used in the past 12 months, megagrams;

$PV_{TG}$  = Weighted average MACT model point value for tooling gel coat used in the past 12 months, kilograms per megagram;

$M_{TG}$  = Mass of tooling gel coat used in the past 12 months, megagrams;

- c. When using Emissions Averaging, the permittee shall use the following equation to calculate the weighted average MACT model point value for each resin and gel coat operation:

$$PV_{OP} = \frac{\sum_{i=1}^n M_i PV_i}{\sum_{i=1}^n M_i}$$

Where:

$PV_{OP}$  = Weighted average MACT model point value for each open molding operation ( $PV_R$ ,  $PV_{PG}$ ,  $PV_{CG}$ ,  $PV_{TR}$ , and  $PV_{TG}$ ) included in the average, kilograms of HAP per megagram of material applied;

$M_i$  = Mass of resin or gel coat  $i$  used within an operation in the past 12 months, megagrams,

$n$  = Number of different open molding resins and gel coats used within an operation in the past 12 months;

$PV_i$  = MACT model point value for resin or gelcoat  $i$  used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

- d. When using Emissions Averaging, the permittee shall use the following equations for calculating the MACT model point values ( $PV_i$ ) for each resin and gel coat used in each operation in the past 12 months:

- i. For production and tooling resin using an atomized application method:

$$PV_i = 0.014 \times (\text{Resin HAP}\%)^{2.425}$$

- ii. For production and tooling resin using an atomized application method plus vacuum bagging with roll-out:

$$PV_i = 0.01185 \times (\text{Resin HAP } \%)^{2.425}$$

- iii. For production and tooling resin using an atomized application method plus vacuum bagging without roll-out:

$$PV_i = 0.00945 \times (\text{Resin HAP}\%)^{2.425}$$

- iv. For production and tooling resin using a non-atomized application method:

$$PV_i = 0.014 \times (\text{Resin HAP}\%)^{2.275}$$

- v. For production and tooling resin using a non-atomized application method plus vacuum bagging with roll-out:

$$PV_i = 0.0110 \times (\text{Resin HAP } \%)^{2.275}$$

- vi. For production and tooling resin using an atomized application method plus vacuum bagging without roll-out:

$$PV_i = 0.0076 \times (\text{Resin HAP}\%)^{2.275}$$

- vii. For pigmented gel coat, clear gel coat, and tooling gel coat using for all methods of application;

$$PV = 0.445 \times (\text{Gel coat HAP}\%)^{1.675}$$

- e. When using Compliant Materials, the permittee shall use the following equation to calculate the weighted average organic HAP content for all resins and gel coats used in each operation in the past 12 months:

$$\text{Weighted - average HAP Content} = \frac{\sum_{i=1}^n M_i \text{HAP}_i}{\sum_{i=1}^n M_i}$$

Where:

Weighted-average HAP content is expressed as a percentage;

$M_i$  = Mass of open molding resin or gel coat  $i$  used in the last 12 month in an operation, megagrams;

$\text{HAP}_i$  = Organic HAP content, by weight percent, of open molding resin or gel coat  $i$  used in the past 12 months in an operation.

$n$  = Number of different open molding resins or gel coats used in the past 12 months in an operation

- f. When using Compliant Materials, the permittee shall use the following equation to calculate the MACT model point value for filled material on an as-applied basis:

$$PV_F = PV_u \times \frac{(100 - \% \text{ Filler})}{100}$$

Where:

$PV_F$  = The as-applied MACT model point value for a filled production resin or tooling resin, kilograms organic HAP per megagram of filled material;

$PV_u$  = The MACT model point value for the neat (unfilled) resin, before filler is added, as calculated using the equations listed in 4.d.i-vi of Appendix 7;

% Filler = The weight percent of filler in the as-applied filled resin system.

## Appendix 8. Reporting

### A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

ROP No: MI-ROP-N1328-2011  
Expiration Date: November 21, 2016  
PTI No: MI-PTI-N1328-2011

**B. Other Reporting**

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.