

Michigan Department of Environmental Quality  
Air Quality Division

EFFECTIVE DATE: MAY 7, 2018

ISSUED TO

**Ford Motor Company – Flat Rock Assembly**

State Registration Number (SRN): N0929

LOCATED AT

1 International Drive, Flat Rock, Michigan 48134

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-N0929-2018

Expiration Date: MAY 7, 2023

Administratively Complete ROP Renewal Application Due Between  
November 7, 2021 and November 7, 2022

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-N0929-2018

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

---

Wilhemina McLemore, Detroit District Supervisor

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>AUTHORITY AND ENFORCEABILITY .....</b> | <b>4</b>  |
| <b>A. GENERAL CONDITIONS.....</b>         | <b>5</b>  |
| Permit Enforceability .....               | 5         |
| General Provisions.....                   | 5         |
| Equipment & Design .....                  | 6         |
| Emission Limits.....                      | 6         |
| Testing/Sampling .....                    | 6         |
| Monitoring/Recordkeeping .....            | 7         |
| Certification & Reporting .....           | 7         |
| Permit Shield .....                       | 8         |
| Revisions .....                           | 9         |
| Reopenings.....                           | 9         |
| Renewals.....                             | 10        |
| Stratospheric Ozone Protection .....      | 10        |
| Risk Management Plan.....                 | 10        |
| Emission Trading .....                    | 10        |
| Permit to Install (PTI) .....             | 11        |
| <b>B. SOURCE-WIDE CONDITIONS .....</b>    | <b>12</b> |
| <b>C. EMISSION UNIT CONDITIONS .....</b>  | <b>13</b> |
| EMISSION UNIT SUMMARY TABLE.....          | 13        |
| EU-PLASTIC PURGE & CLEAN .....            | 16        |
| EU-Stamping Shop .....                    | 18        |
| EU-PRETREATMENT .....                     | 20        |
| EU-ECOAT .....                            | 22        |
| EU-NGB ADHESIVES & SEALERS.....           | 24        |
| EU-DEADENERS .....                        | 26        |
| EU-GLASS INSTALL .....                    | 28        |
| EU-GUIDECOAT .....                        | 30        |
| EU-TOPCOAT .....                          | 33        |
| EU-FINAL REPAIR .....                     | 36        |
| EU-BLACKOUT/WAX .....                     | 38        |
| EU-EXPORT WAX.....                        | 40        |
| EU-UNDERCOAT .....                        | 42        |
| EU-ASSEMBLY PURGE & CLEAN.....            | 44        |
| EU-TANKS.....                             | 46        |
| EU-FLUID FILL.....                        | 48        |
| EU-PLASTIC.....                           | 50        |
| EU-BULBCRUSHER.....                       | 53        |
| <b>D. FLEXIBLE GROUP CONDITIONS.....</b>  | <b>56</b> |
| FLEXIBLE GROUP SUMMARY TABLE.....         | 56        |
| FG-FACILITY.....                          | 59        |
| FG-CONTROLS.....                          | 65        |
| FG-AUTO MACT.....                         | 69        |
| FG-OLD FACILITY.....                      | 77        |
| FG-PLASTIC MACT.....                      | 80        |

FG-BOILER MACT ..... 89

FG-CIRICEMACT ..... 92

FG-SIRICEMACT..... 96

FG – 500HPCIRICEMACT ..... 100

FG-Natural Gas ..... 102

FG-COLDCLEANERS ..... 104

FG-RULE 287(c) ..... 107

FG-RULE290 ..... 109

**E. NON-APPLICABLE REQUIREMENTS ..... 112**

**APPENDICES ..... 113**

Appendix 1. Abbreviations and Acronyms..... 113

Appendix 2. Schedule of Compliance..... 114

Appendix 3. Monitoring Requirements ..... 114

Appendix 4. Recordkeeping ..... 122

Appendix 5. Testing Procedures ..... 122

Appendix 6. Permits to Install..... 123

Appendix 7. Emission Calculations ..... 123

Appendix 8. Reporting ..... 126

## **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 are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/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 a federally enforceable Source-Wide PTI 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).<sup>2</sup> **(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. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, “Except as provided in subrules 2, 3, and 4 of this rule, 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 the following:”<sup>2</sup> **(R 336.1301(1))**
  - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

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).<sup>2</sup> **(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(5))**

## 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 60604-3507. **(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))**
- 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.
  - 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.<sup>2</sup> **(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))**
- The applicable requirements are included and are specifically identified in the ROP.
  - 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:
- 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))**
  - 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))**
  - 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(10))**
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(9))**

## 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 reclaiming, 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 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 68.10(a):
- June 21, 1999,
  - Three years after the date on which a regulated substance is first listed under 40 CFR 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 of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, 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.

### 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<br>(Including Process Equipment & Control Device(s))  | Installation Date/<br>Modification Date | Flexible Group ID                           |
|----------------------------|---|---|---|
| EU-PLASTIC PURGE & CLEAN   | Use of purge and cleaning solvents within the plastic parts coating operation (EU-PLASTIC).   | 2/18/85                                 | FG-PLASTIC MACT                             |
| EU-STAMPINGSHOP            | Stamping shop operations.   | 2/18/85                                 | FG-FACILITY                                 |
| EU-PRETREATMENT            | Pretreatment of the vehicle surface to prepare it for electrocoating  | 2/18/85                                 | FG-FACILITY                                 |
| EU-ECOAT                   | Electrocoating of vehicle bodies.   | 2/18/85                                 | FG-FACILITY,<br>FG-CONTROLS<br>FG-AUTO MACT |
| EU-NGB ADHESIVES & SEALERS | Sealer and adhesive materials used in the body construction processes.  | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-DEADENERS               | Sound deadener material sprayed into body cavity areas of the vehicle.  | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-GLASS INSTALL           | Adhesives, primers, sealers, and solvents used for windshield and rear window installation.   | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-GUIDECOAT               | Application of guidecoat coating including anti-chip primer and black out.  | 2/18/85                                 | FG-FACILITY,<br>FG-CONTROLS<br>FG-AUTO MACT |
| EU-TOPCOAT                 | Application of topcoat coating including tutone/repair.   | 2/18/85                                 | FG-FACILITY,<br>FG-CONTROLS<br>FG-AUTO MACT |
| EU-FINAL REPAIR            | Miscellaneous body coating processes including final repair, transit coating, and spot repair. Spot repair is considered minor paint repairs not conducted in a booth | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-BLACKOUT/WAX            | Application of black out and/or wax coatings.   | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-UNDERCOAT               | Application of undercoat coating.   | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |
| EU-ASSEMBLY PURGE & CLEAN  | Use of purge and cleaning solvents within the automobile coating and assembly processes.  | 2/18/85                                 | FG-FACILITY,<br>FG-AUTO MACT                |

| Emission Unit ID  | Emission Unit Description<br>(Including Process Equipment & Control Device(s))   | Installation Date/<br>Modification Date | Flexible Group ID               |
|-------------------|--|---|---------------------------------|
| EU-TANKS          | Various above ground and underground storage tanks used to store fluids, fuels, and solvents.                                    | 2/18/85                                 | FG-FACILITY,<br>FG-OLD FACILITY |
| EU-FLUID FILL     | Vehicle fluid and fuel fill operations.  | 2/18/85                                 | FG-FACILITY                     |
| EU-BOILER62013    | A Natural gas fired Cleaver-Brooks Boiler (café Mech. Penthouse) 62013.  | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER62018    | A Natural gas fired Cleaver-Brooks Boiler (café Mech. Penthouse) 62018.  | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER62019    | A Natural gas fired Cleaver-Brooks Boiler (Admin Mech. Penthouse) 62019.   | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER62026    | A Natural gas fired Cleaver-Brooks Boiler (Admin Mech. Penthouse) 62026.   | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER62575    | A Natural gas fired Cleaver-Brooks Boiler (Fire Pump House) 62575.   | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER63136    | A Natural gas fired Cleaver-Brooks Boiler (Learning Center Boiler Room) 623136.  | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-BOILER63145    | A Natural gas fired Cleaver-Brooks Boiler (Learning Center Boiler Room) 623145.  | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-PEBOILER1      | A Natural Gas fired Sellers PE Boiler 1.   | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-PEBOILER2      | A Natural Gas fired Sellers PE Boiler 2.   | Pre June 4, 2010                        | FG-FACILITY<br>FG-BOILERMACT    |
| EU-PLASTICSBOILER | A Natural Gas fired Plastics Department Boiler.  | Pre June 4, 2010                        | FG-FACILITY<br>FG- BOILERMACT   |
| EU-MSCEMGEN1      | MSC Emergency Electrical Generator (Mon #1-Sub 11B), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN2      | MSC Emergency Electrical Generator (Mon #1-Sub 12A), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN3      | MSC Emergency Electrical Generator (Mon #2-Sub 10), natural gas fired, 86 HP   | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN4      | MSC Emergency Electrical Generator (Mon #3-Sub 7B), natural gas fired, 86 HP   | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN5      | MSC Emergency Electrical Generator (Mon #3-Sub 5B), natural gas fired, 86 HP   | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN6      | MSC Emergency Electrical Generator (Mon #1-Sub 11A), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN7      | MSC Emergency Electrical Generator (Mon #2-Sub 9), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN8      | MSC Emergency Electrical Generator (Mon #4-Sub 3), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN9      | MSC Emergency Electrical Generator (Mon #4-Sub 1), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN10     | MSC Emergency Electrical Generator (Mon #1-Sub 13A), natural gas fired, 86 HP  | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-MSCEMGEN11     | MSC Emergency Electrical Generator (Body Shop Monitor Emergency Lighting), Cummins model GGHE 1332085 natural gas fired, 80.5 HP | March 4, 2013                           | FG-FACILITY<br>FG-SIRICEMACT    |
| EU-LNCNTEMGEN     | MSC Emergency Electrical Generator (Learning Center Basement), natural gas fired <100 HP   | Pre-1986                                | FG-FACILITY<br>FG-SIRICEMACT    |

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))  | Installation Date/<br>Modification Date | Flexible Group ID                 |
|------------------|---|---|-----------------------------------|
| EU-PAINTEMGEN    | Paint Emergency Electrical Generator, diesel fired, 760 HP.   | 5/1/1986                                | FG-FACILITY<br>FG-500HPCIRICEMACT |
| EU-UTFPH-SOUTH   | Utility Fire Pump House – South Pump, diesel fired, 267 HP  | 10/23/1986                              | FG-FACILITY<br>FG-CIRICEMACT      |
| EU-UTFPH-MIDDLE  | Utility Fire Pump House – Middle Pump, diesel fired, 267 HP   | 10/23/1986                              | FG-FACILITY<br>FG-CIRICEMACT      |
| EU-UTFPH-NORTH   | Utility Fire Pump House – North Pump, diesel fired, 267 HP  | 10/23/1986                              | FG-FACILITY<br>FG-CIRICEMACT      |
| EU-MSCFIREPUMP   | MSC Fire Pump House, diesel fired, <500 HP  | 3/26/1971                               | FG-FACILITY<br>FG-CIRICEMACT      |
| EU-SERVEEMGGEN   | Server Emergency Electrical Generator, natural gas-fired, 209 HP (Shop Office)  | 2/10/2005                               | FG-FACILITY<br>FG-CIRICEMACT      |
| EU-PLASTIC       | Coating of plastic parts.   | 2/18/85                                 | FG-PLASTIC MACT                   |
| EU-HEATERS       | Space Heaters   | 2/18/85                                 | FG-FACILITY                       |
| EU-BULBCRUSHER   | One 55-gallon drum-top fluorescent light bulb crusher, controlled by a bag filter followed in series by a HEPA filter and an activated carbon filter.   | 6/9/10                                  | FG-FACILITY                       |
| EU-ALSHREDDER    | Aluminum shredder located in Stamping Plant.  | July 20, 2013                           | FG-RULE290,<br>FG-FACILITY        |
| EU-EXPORTWAX     | Cavity wax applied to vehicles to be exported.  | 4/2015                                  | FG-AUTOMACT<br>FG-FACILITY        |
| EU-COLDCLEANERS  | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | NA                                      | FG-Coldcleaners,<br>FG-FACILITY   |
| EU-RULE287       | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).   | NA                                      | FG-Rule287,<br>FG-FACILITY        |
| EU-RULE290       | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.  | NA                                      | FG-RULE290,<br>FG-FACILITY        |

**EU-PLASTIC PURGE & CLEAN  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Use of purge and cleaning solvents within the plastic parts coating operation (EU-PLASTIC).

**Flexible Group ID:** FG-PLASTIC MACT

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

| Pollutant | Limit                  | Time Period/ Operating Scenario | Equipment                | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|------------------------|---------------------------------|--------------------------|----------------------------|------------------------------------|
| 1. VOC    | 118.2 tpy <sup>2</sup> | 12-month rolling time period    | EU-PLASCTI PURGE & CLEAN | SC VI.1                    | R336.1702(a)                       |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

1. The VOC content, water content and density of any solvent as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any material shall be verified using federal Reference Test Method 24<sup>2</sup>. (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**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 keep the following information on a monthly basis for EU-PLASCTI PURGE & CLEAN:
  - a. Gallons (with water) of each VOC containing purge and clean-up solvent used.
  - b. Where applicable, gallons (with water) of each VOC containing purge and clean-up solvent reclaimed.



- c. The VOC content (with water) in pounds per gallon of each purge and clean-up solvent used.
- d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month. These calculations shall be done according to the method outlined in Appendix 7.
- e. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. These calculations shall be done according to the method outlined in Appendix 7.

The permittee shall keep the records on file, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 51.21)

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-Stamping Shop  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Stamping shop operations.

Flexible Group ID: FG-FACILITY

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| 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

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

1. NA

**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 any portion of EU-STAMPING SHOP shall not be directly discharged to the ambient air at any time.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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

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).

**EU-PRETREATMENT  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Pretreatment of the vehicle surface to prepare it for electrocoating.

**Flexible Group ID:** FG-FACILITY

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV345        | 18 <sup>2</sup>                     | 72 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV390        | 20 <sup>2</sup>                     | 70 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3.SV392         | 20 <sup>2</sup>                     | 70 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-ECOAT  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Electrocoating of vehicle bodies.

**Flexible Group ID:** FG-FACILITY, FG-CONTROLS, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

Regenerative thermal oxidizer for the oven

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

1. NA

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

1. The permittee shall not operate the cure oven portion of EU-ECOAT unless the regenerative thermal oxidizer is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the three regenerative catalytic oxidizers and the one regenerative thermal oxidizer includes maintaining a minimum VOC destruction efficiency of 95 percent or an average control system outlet VOC concentration of less than or equal to 5 ppm as propane.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content, water content and density of the resin, pigment and additives, as added to the Electrocoat tank, shall be determined using federal Reference Test Method 24. Alternatively, the VOC content, water content and density of the subject materials may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the Method 24 results shall be used to determine compliance.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV355        | 48 <sup>2</sup>                     | 50 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV389        | 26 <sup>2</sup>                     | 80 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3. SV103        | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-NGB ADHESIVES & SEALERS  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Sealer and adhesive materials used in the body construction processes.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

- The VOC content of each sealer and adhesive, as applied, shall be determined using federal Reference Test Method 24 at representative time(s) and temperature(s) used to cure the related coating or material in practice as provided by ASTM D2369-98, 1.4 and Note 3. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the test results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content of each sealer and adhesive shall be verified by testing at owner’s expense.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-DEADENERS  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Sound deadener material sprayed into body cavity areas of the vehicle.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

- The VOC content of each sound dampening material, as applied, shall be determined using federal Reference Test Method 24 at representative time(s) and temperature(s) used to cure the related coating or material in practice as provided by ASTM D2369-98, 1.4 and Note 3. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-GLASS INSTALL  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Adhesives, primers, sealers and solvents used for windshield and rear window installation.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

1. The VOC content of each glass adhesive material, as applied, shall be determined using federal Reference Test Method 24 at representative time(s) and temperature(s) used to cure the related coating or material in practice as provided by ASTM D2369-98, 1.4 and Note 3. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV601        | 25 <sup>2</sup>                     | 34 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV602        | 25 <sup>2</sup>                     | 34 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3. SV603        | 20 <sup>2</sup>                     | 34 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 4. SV604        | 20 <sup>2</sup>                     | 34 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-GUIDECOAT  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of guidecoat coating including anti-chip primer, undercoating and black-out.

**Flexible Group ID:** FG-FACILITY, FG-CONTROLS, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

A waterwash system, three regenerative catalytic oxidizers and one regenerative thermal oxidizer.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate any portion of EU-GUIDECOAT unless the three regenerative catalytic oxidizers and the one regenerative thermal oxidizer are all installed, maintained and operated in a satisfactory manner. Satisfactory operation of the catalytic and thermal oxidizers includes maintaining a minimum VOC destruction efficiency of 95 percent or an average control system outlet VOC concentration of less than or equal to 5 ppm as propane.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
2. The permittee shall not operate the spray booth portions of EU-GUIDECOAT unless the water wash particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the water wash particulate controls includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content of any coating or material as applied or as received shall be determined using federal Reference Test Method 24 and formulation data as specified in the USEPA "Protocol for Determining the Daily Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA 453/R-08-002, as amended. Upon request of the AQD District Supervisor, the analytical VOC content, as received, of each non-waterborne coating shall be verified by testing at owner's expense.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV304        | 48 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV305        | 59 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3. SV306        | 59 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 4. SV307        | 21 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 5. SV308        | 58 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements  |
|-----------------|-------------------------------------|------------------------------------|---|
| 6. SV309        | 58 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 7. SV313        | 64 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 8. SV101        | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 9.SV102         | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 10. SV103       | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the federal standards of Performance for New Stationary Sources, 40 CFR, Part 60, Subpart A & MM. **(R336.1213(3))**

**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).



**EU-TOPCOAT  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of topcoat coating, including tutone/repair.

**Flexible Group ID:** FG-FACILITY, FG-CONTROLS, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

A waterwash system, three regenerative catalytic oxidizers, and one regenerative thermal oxidizer.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate any portion of EU-TOPCOAT unless the appropriate portions of the three regenerative catalytic oxidizers and the one regenerative thermal oxidizer are all installed, maintained and operated in a satisfactory manner. Satisfactory operation of the catalytic and thermal oxidizers includes maintaining a minimum VOC destruction efficiency of 95 percent or an average control system outlet VOC concentration of less than or equal to 5 ppm as propane.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
2. The permittee shall not operate the spray booth portions of EU-TOPCOAT unless the water wash particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the water wash particulate controls includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content of any coating or material as applied or as received shall be determined using federal Reference Test Method 24 and formulation data as specified in the USEPA "Protocol for Determining the Daily Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA 453/R-08-002, as amended. Upon request of the AQD District Supervisor, the analytical VOC content, as received, of each non-waterborne coating shall be verified by testing at owner's expense.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

**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. SV321        | 64 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 2. SV322        | 64 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 3. SV331        | 64 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 4. SV332        | 54 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)R336.1901 |
| 5. SV335        | 62 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements   |
|-----------------|-------------------------------------|------------------------------------|--|
| 6. SV336        | 62 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)R336.1901 |
| 7. SV337        | 62 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)R336.1901 |
| 8. SV338        | 62 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 9. SV339        | 38 <sup>2</sup>                     | 92 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 10. SV344       | 54 <sup>2</sup>                     | 83 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)R336.1901 |
| 11. SV101       | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 12. SV102       | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |
| 13. SV103       | 108 <sup>2</sup>                    | 120 <sup>2</sup>                   | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d)          |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-FINAL REPAIR  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Miscellaneous body coating processes including final repair, transit coating, and spot repair. Spot repair is considered minor paint repairs not conducted in a booth.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate EU-FINALREPAIR unless the dry filter particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the dry filter particulate controls includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content, water content and density of any coating as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any sealer and adhesive shall be verified using federal Reference Test Method 24.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV399        | 34 <sup>2</sup>                     | 42 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV400        | 34 <sup>2</sup>                     | 42 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3. SV403        | 34 <sup>2</sup>                     | 43 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 4. SV404        | 34 <sup>2</sup>                     | 43 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-BLACKOUT/WAX  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of black out and/or wax coatings.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

Dry Filter Particulate Controls

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate EU-BLACKOUT unless the dry filter particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the dry filter particulate controls includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content of any coating or material as applied or as received shall be determined using federal Reference Test Method 24 and formulation data as specified in the USEPA “Protocol for Determining the Daily Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” September 2008, EPA 453/R-08-002, as amended. Upon request of the AQD District Supervisor, the analytical VOC content, as received, of each non-waterborne coating shall be verified by testing at owner’s expense.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV341        | 62 <sup>2</sup>                     | 83 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV342        | 62 <sup>2</sup>                     | 83 <sup>2</sup>                    | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-EXPORT WAX  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of cavity wax coatings to vehicles to be exported from the country.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

Dry Filter Particulate Controls

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate EU-EXPORTWAX unless the dry filter particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI.2. **(R336.1205, R336.1331, R336.1910, R336.2803, 40 CFR 52.21 (c)&(d))**

**V. TESTING/SAMPLING**

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

1. The VOC content of any coating or material as applied or as received shall be determined using federal Reference Test method 24 and formulation data as specified in the USEPA “Protocol for Determining the Daily Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations.” September 2008, EPA 453/R-08-002, as amended. Upon request of the AQD District Supervisor, the analytical VOC content as received, of each non-waterborne coating shall be verified by testing at owner’s expense. **(R336.1225, R336.1702(a), R336.1901, R336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)**

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA



**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. VRQC 1       | 36.0 <sup>2</sup>                   | 55.0 <sup>2</sup>                  | R336.1225, R336.1901, R336.2803, R336.2804 |
| 2. VRQC 2       | 36.0 <sup>2</sup>                   | 55.0 <sup>2</sup>                  | R336.1225, R336.1901, R336.2803, R336.2804 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-UNDERCOAT  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Application of undercoat coating

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

Dry Filter Particulate Controls

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

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

1. The permittee shall not operate EU-UNDERCOAT unless the dry filter particulate controls are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the dry filter particulate controls includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2 when the equipment is operating.<sup>2</sup> (R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

**V. TESTING/SAMPLING**

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

1. The VOC content of any coating or material as applied or as received shall be determined using federal Reference Test Method 24 and formulation data as specified in the USEPA “Protocol for Determining the Daily Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” September 2008, EPA 453/R-08-002, as amended. Upon request of the AQD District Supervisor, the analytical VOC content, as received, of each non-waterborne coating shall be verified by testing at owner’s expense.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

**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. SV301        | 47                                  | 92                                 | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 2. SV302        | 47                                  | 92                                 | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 3. SV303        | 23                                  | 92                                 | R 336.1225,<br>R 336.1901,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-ASSEMBLY PURGE & CLEAN  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Use of purge solvents with the automobile coating and assembly processes.

**Flexible Group ID:** FG-FACILITY, FG-AUTO MACT

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

1. The VOC content, water content and density of any solvent as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any material shall be verified using federal Reference Test Method 24.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

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

NA

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-TANKS  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Various above ground and underground storage tanks used to store fluids, fuels, and solvents.

**Flexible Group ID:** FG-FACILITY, FG-OLD FACILITY

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))

NA

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

|   |
|---|
| <b>EU-FLUID FILL<br/>EMISSION UNIT CONDITIONS</b> |
|---|

**DESCRIPTION**

Vehicle fluid and fuel fill operations

**Flexible Group ID:** FG-FACILITY

**POLLUTION CONTROL EQUIPMENT**

Onboard vapor recovery system.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

1. The permittee shall not add fuel to any vehicle without an Onboard Re-fueling Vapor Recovery system unless the VOC emissions from the fuel filling process are controlled by a VOC control device, which achieves a minimum of 95% (by weight) destruction efficiency.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21)

**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))

NA

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

**EU-PLASTIC  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Coating of plastic parts.

**Flexible Group ID:** FG-PLASTIC MACT

**POLLUTION CONTROL EQUIPMENT**

Thermal oxidizer, water wash system.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit                           | Time Period/ Operating Scenario   | Equipment  | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|---------------------------------|---|------------|----------------------------|------------------------------------|
| 1. VOC    | 515.8 lbs per hour <sup>2</sup> | Hour  | EU-PLASTIC | GC 13<br>SC VI.2           | R336.1702(c)                       |
| 2. VOC    | 700.78 tpy <sup>2</sup>         | 12-month rolling time period as determined at the end of each calendar month. | EU-PLASTIC | SC VI.2                    | R336.1702(c)                       |
| 3. PM     | 5.5 lbs per hour <sup>2</sup>   | Test Protocol   | EU-PLASTIC | GC 13<br>SC VI.3           | R336.1331(c)                       |
| 4. PM     | 7.69 tpy <sup>2</sup>           | 12-month rolling time period as determined at the end of each calendar month. | EU-PLASTIC | SC VI.3                    | R336.1331(c)                       |

**II. MATERIAL LIMIT(S)**

| Material | Limit   | Time Period/ Operating Scenario | Equipment  | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|---|---------------------------------|------------|----------------------------|------------------------------------|
| 1. VOC   | Lb/gal (minus water) as applied and as referenced in Rule 632, Table 66 for automotive plastic parts <sup>2</sup> | Instantaneous                   | EU-PLASTIC | SC VI.2                    | R336.1632(3)(a)                    |

\*The phrase “minus water” shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. (R336.1602(4))

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

NA

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

1. The permittee shall not operate the plastic crusher portion of EU-PLASTIC unless the mechanical collector is installed and operating in a satisfactory manner.<sup>2</sup> **(R 336.1910)**
2. The permittee shall not operate the coating spray booths portions of EU-PLASTIC unless the water wash equipment is installed and operating in a satisfactory manner.<sup>2</sup> **(R 336.1910)**
3. The permittee shall not operate the oven portions of EU-PLASTIC unless the associated thermal oxidizers are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes maintaining a minimum combustion chamber temperature of 1400°F and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, the permittee may use an average temperature of 1400°F based upon a three-hour rolling average.<sup>2</sup> **(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. The VOC content, water content and density of any coating or material as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24.<sup>2</sup> **(R 336.2040(5))**

**See Appendix 5**

#### **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 install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device, with temperature alarms and a temperature recording device, in the combustion chamber of each thermal oxidizer to monitor and record its temperature on a continuous basis, during operation of EU-PLASTIC. A temperature alarm shall sound when any thermal oxidizer temperature drops below 1400°F. Continuous is defined as a minimum of one temperature reading/recording once every 15 minutes.<sup>2</sup> **(R 336.1910)**
2. The permittee shall keep the following information on a calendar month basis for the EU-PLASTIC:
  - a. Gallons (with water) of each coating used.
  - b. VOC content (minus water) of each coating as applied.
  - c. Hours of operation.
  - c. If any coating is used on a given day that does not meet the limit specified in Special Condition II.1 for its category, VOC emission calculations determining the daily volume-weighted average VOC content of all coatings in that category, as applied, shall be conducted for that day.
  - d. VOC and PM mass emission calculations determining the hourly emission rate in lbs per hour on a monthly basis.
  - e. VOC and PM mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1632, R 336.2040(5), R 336.2041, R336.1213(3))**

3. The permittee shall monitor the condition of the water wash system through weekly visual inspections or through the use of low flow alarms on water pumps that feed the system with records of the dates of the low flow alarms and the dates and reasons for maintenance or repairs. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> **(R336.1213(3))**

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. Quarterly reporting of all the material usage data within 30 days following the end of the quarter in which the data were collected. **(R336.1213(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:

| <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. SV510                   | 15 <sup>1</sup>                            | 81 <sup>1</sup>                           | R336.1901                                 |
| 2. SV516                   | 15 <sup>1</sup>                            | 81 <sup>1</sup>                           | R336.1901                                 |
| 3. SV519                   | 35 <sup>1</sup>                            | 81 <sup>1</sup>                           | R336.1901                                 |
| 4. SV526                   | 15 <sup>1</sup>                            | 81 <sup>1</sup>                           | R336.1901                                 |
| 5. SVTALL                  | 156 <sup>1</sup>                           | 198 <sup>1</sup>                          | R336.1901                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of Michigan Air Pollution Control Rule 632. **(R336.1632)**

**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).

**EU-BULBCRUSHER  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One 55-gallon drum-top fluorescent light bulb crusher, controlled by a bag filter followed in series by a HEPA filter and an activated carbon filter.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

Drum-top crusher is controlled by a bag filter followed in series by a HEPA filter and an activated carbon filter.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

1. The permittee shall not crush more than the equivalent of 150 eight-foot fluorescent light bulbs in EU-BULBCRUSHER per calendar day.<sup>1</sup> **(R 336.1224, R 336.1901)**
2. The permittee shall not crush more than the equivalent of 3000 eight-foot fluorescent light bulbs in EU-BULBCRUSHER per 12-month rolling time period.<sup>1</sup> **(R 336.1224, R 336.1901)**

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

1. EU-BULBCRUSHER shall be installed, maintained, and operated in a satisfactory manner to minimize emissions to the ambient air. Recommended Best Management Practices for Drum-top Crushers and Recommended Best Management Practices for Lamp Handling & Storage are specified in Appendices 1 and 2.<sup>1</sup> **(R 336.1224, R 336.1910)**
2. The permittee shall maintain and operate EU-BULBCRUSHER according to the manufacturer’s specifications and procedures.<sup>2</sup> **(R 336.1224, R 336.1901, R 336.1910)**
3. EU-BULBCRUSHER shall be located a minimum of 50 feet from the property line; 300 feet from any existing places of residence or private or public assembly; 500 feet from a school, apartment building, or institutional occupancy; and not less than 1000 feet from a hospital or nursing home. **(R 336.1901)**
4. The permittee shall minimize the time necessary to change-out the 55-gallon drum portion of EU-BULBCRUSHER. All drum change-outs shall be performed according to the manufacturer’s specifications and procedures.<sup>1</sup> **(R 336.1224, R 336.1901)**
5. The permittee shall completely replace the carbon within the activated carbon filter or replace the entire activated carbon filter, a minimum of once every two calendar years. Alternatively, the permittee may demonstrate at the end of two years, and at least once per year thereafter, that the activated carbon filter is still effective.<sup>1</sup> **(R 336.1224, R 336.1901)**
6. All broken glass and metal pieces collected in the 55-gallon drum portion of EU-BULBCRUSHER shall be properly handled, transported, and disposed of in accordance with all applicable State rules and federal regulations.<sup>1</sup> **(R 336.1224, R 336.1901)**

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

1. The permittee shall not operate EU-BULBCRUSHER unless the bag filter followed in series by a HEPA filter and an activated carbon filter are installed, maintained, and operated in a satisfactory manner.<sup>2</sup> **(R 336.1224, R 336.1901, R 336.1910)**
2. The permittee shall not operate EU-BULBCRUSHER with a warped drum that prevents the crushing unit from sealing flush with the drum top. The permittee shall verify that the seal between the crusher unit and the drum is tight before each use, according to manufacturer's recommended procedures.<sup>1</sup> **(R 336.1224, R 336.1901)**
3. The permittee shall seal the feed chute of EU-BULBCRUSHER with a cap or other similar device whenever the unit is not in use.<sup>1</sup> **(R 336.1224, R 336.1901)**

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

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

1. If the activated carbon filter or the carbon within the filter is not replaced at the end of two calendar years, the permittee shall demonstrate, to the satisfaction of the AQD, the effectiveness of the activated carbon filter. If control device destruction efficiency testing is required in order to complete this demonstration, the permittee shall submit to the AQD a methodology outlining how the testing will be performed, no less than 60 days prior to completing the demonstration. The AQD must approve the testing methodology prior to completing the demonstration. Submittal of a complete report of the demonstration results shall be submitted to the AQD within 60 days following the last date of the demonstration.<sup>2</sup> **(R 336.1224, R 336.2001, R 336.2003, R 336.2004)**

See Appendix 5

#### **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 keep the following information on a monthly basis for EU-BULBCRUSHER:
  - a. The number and size of fluorescent light bulbs crushed per calendar day.
  - b. The number and size of fluorescent light bulbs crushed per calendar month.
  - c. The number and size of fluorescent light bulbs crushed per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in the format specified in Appendix 3.<sup>1</sup> **(R 336.1224, R 336.1901)**

2. The permittee shall keep, in a satisfactory manner, records indicating when the HEPA filter, the carbon or the entire activated carbon filter was replaced.<sup>1</sup> **(R 336.1224, R 336.1901)**
3. The permittee shall keep, in a satisfactory manner, transportation, and disposal records of all broken glass and metal pieces collected in the 55-gallon drum portion of EU-BULBCRUSHER.<sup>1</sup> **(R 336.1224, R 336.1901)**
4. The permittee shall monitor and record, in a satisfactory manner, the room temperature, on an hourly basis, while EU-BULBCRUSHER is operating. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>1</sup> **(R 336.1224, R 336.1901)**

See Appendix 3 and 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)**

1. The exhaust gases from EU-BULBCRUSHER shall not be directly discharged to the ambient air at any time.<sup>1</sup>  
**(R 336.1224, R 336.1901)**

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

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  |
|-------------------|---|---|
| FG-FACILITY       | This flexible group covers equipment used for automotive assembly and painting operations, excluding plastic parts coating operations, for the Ford Flat Rock Assembly Plant. | All emission units (including EU-PRETREATMENT, EU-ECOAT, EU-NGB ADHESIVES & SEALERS, EU-DEADENERS, EU-GLASS INSTALL, EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR, EU-BLACKOUT/WAX, EU-UNDERCOAT, EU-ASSEMBLY PURGE & CLEAN, EU-TANKS, EU-FLUID FILL, EU-START-UP/ROLL TEST, EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER and EU-NATURAL GAS) and flexible groups associated with the automotive assembly and painting operations. This includes all clean-up and purge activities associated with automobile painting and assembly operations, storage tanks, and paint sludge handling and disposal operations. |



| Flexible Group ID | Flexible Group Description  | Associated Emission Unit IDs   |
|-------------------|---|--|
| FG-CONTROLS       | Three regenerative catalytic oxidizers and one regenerative thermal oxidizer used for control of VOC emissions from the electrocoat system, the paint spray booths, and curing ovens.   | EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT   |
| FG-AUTO MACT      | Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts for new automobiles or new light duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment. | EU-ECOAT, EU-NGB ADHESIVES & SEALERS, EU-DEADENERS, EU-GLASS INSTALL EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR, EU-BLACKOUT/WAX, EU-EXPORTWAX, EU-UNDERCOAT, EU-ASSEMBLY PURGE & CLEAN |
| FG-OLD FACILITY   | Organic Liquid Distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. Specifically, these conditions cover existing (construction pre dates April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles.  | EU-Final Assembly  |
| FG-PLASTIC MACT   | Each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR, Part 63, Subpart PPPP, 63.4481(a)(2) to (5). Surface coating is defined by 40 CFR 63.4481 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating.  | EU-PLASTIC and EU-PLASTIC PURGE & CLEAN  |
| FG-NATURAL GAS    | Natural gas burning associated with the automotive assembly and painting operations, excluding plastic parts coating operations. The equipment includes process boilers, space heaters, process ovens, and miscellaneous support equipment installed under this permit.   | EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER                      |

| Flexible Group ID  | Flexible Group Description   | Associated Emission Unit IDs  |
|--------------------|--|---|
| FG-BOILER MACT     | This Flexible Group establishes the national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial and institutional boilers and process heaters located at major sources of HAP as found in 40 CFR Subpart DDDDD. | EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER |
| FG-CIRICEMACT      | 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE less than 500 bhp.                | EU-UTFPH-SOUTH, EU-UTFPH-MIDDLE, EU-UTFPH-NORTH, EUMSCFIREPUMP  |
| FG-SIRICEMACT      | 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition RICE less than 500 bhp.                      | EU-MSCEMGEN1 through EU-MSCEMGEN11, EULNCNTEMGEN,   |
| FG-500HPCIRICEMACT | 40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE greater than 500 bhp.              | EU-PAINTEMGEN   |
| FG-COLD CLEANERS   | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.              | EU-Cold Cleaners  |
| FG-RULE287(c)      | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).  | EU-RULE287(c)   |
| FG-RULE290         | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.   | EU-RULE290<br>EU-ALSHREDDER   |

**FG-FACILITY  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

This flexible group covers equipment used for automotive assembly and painting operations, excluding plastic parts coating operations, for the Flat Rock Assembly Plant (FRAP).

**Emission Units:** All emission units (including EU-STAMPINGSHOP, EU-PRETREATMENT, EU-ECOAT, EU-NGB ADHESIVES & SEALERS, EU-DEADENERS, EU-GLASS INSTALL, EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR, EU-BLACKOUT/WAX, EU-EXPORTWAX EU-UNDERCOAT, EU-ASSEMBLY PURGE & CLEAN, EU-TANKS, EU-FLUID FILL, EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, EU-PLASTICSBOILER, EUMSCEMGEN1 through 11, EU-LNCNTEMGEN, EUPAINTEMGEN, EU-UTFPH-SOUTH, EU-UTFPHMIDDLE, EU-UTFPH-NORTH, EI-MSCFIREPUMP, EU-SERVEEMGEN, EU-HEATERS, EU-BULBCRUSHER, EU-ALSHREDDER, EU-COLDCLEANERS, EU-RULE287, and EU-RULE290) and flexible groups associated with the automotive assembly and painting operations. This includes all clean-up and purge activities associated with automobile painting and assembly operations, storage tanks, and paint sludge handling and disposal operations.

**POLLUTION CONTROL EQUIPMENT**

Three regenerative catalytic oxidizers and one regenerative thermal oxidizer used for control of VOC emissions from the electrocoat system, the paint spray booths, and curing ovens. Particulate emissions are controlled by a waterwash system on the guidecoat spray booths and the topcoat spray booths. Particulate emissions are controlled by dry filters on the final repair spray booths, the blackout and wax booth, and the undercoat booth.

**I. EMISSION LIMIT(S)**

| Pollutant   | Limit                             | Time Period/ Operating Scenario  | Equipment   | Monitoring/ Testing Method | Underlying Applicable Requirements                                 |
|-------------|-----------------------------------|--|-------------|----------------------------|--|
| 1. VOC      | 732.0 tpy <sup>2</sup>            | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY | SC VI.1                    | R 336.1225,<br>R 336.1702(a)<br>R 336.1901                         |
| 2. VOC      | 4.8 pounds per job <sup>2,a</sup> | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY | SC VI.1                    | R 336.1225,<br>R 336.1702(a)<br>R 336.1901                         |
| 3. PM-10*   | 73.0 tpy <sup>2</sup>             | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY | SC VI.1                    | R 336.1205,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 4. PM-2.5** | 73.0 tpy <sup>2</sup>             | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY | SC VI.1                    | R 336.1205,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |
| 5. NOx      | 102.4 tpy <sup>2</sup>            | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY | SC VI.1                    | R 336.1205,<br>R 336.2803,<br>R 336.2804,<br>40 CFR 52.21(c) & (d) |

\*This includes PM-10 from all natural gas combustion in the non-plastic parts painting operations (including the oxidizers) and the assembly operations, all scuff booths, and the paint spray booth portions of EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR.

\*\*This includes PM-2.5 from all natural gas combustion in the non-plastic parts painting operations (including the oxidizers) and the assembly operations, all scuff booths, and the paint spray booth portions of EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR.

<sup>a</sup> In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined VOC emission limit shall be considered compliance with the VOC emission limit established by **R336.1225**, **R336.1702(a)** and **R336.1901** and also compliance with the VOC emission limit in **40 CFR 60.392**, an additional applicable requirement that has been subsumed within this condition.

**II. MATERIAL LIMIT(S)**

| <b>Material</b> | <b>Limit</b>                               | <b>Time Period/ Operating Scenario</b>                                       | <b>Equipment</b> | <b>Monitoring/ Testing Method</b> | <b>Underlying Applicable Requirements</b> |
|-----------------|--|--|------------------|-----------------------------------|---|
| 1. Natural Gas  | 1995 MM cubic feet per year*, <sup>2</sup> | 12-month rolling time period as determined at the end of each calendar month | FG-FACILITY      | SC VI.1                           | R336.1205(1)(a)                           |

\*Total natural gas usage for the painting operations (including the oxidizers) and the assembly operations combined.

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

NA

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

1. The permittee shall equip and maintain each spray coating booth and scuff booth operation with one of the following: water wash particulate controls, dry filter particulate controls, or equivalent particulate control technology.<sup>2</sup> (**R 336.1301**, **R 336.1331**, **R 336.1901**, **R 336.1910**, **R 336.2803**, **R 336.2804**, **40 CFR 52.21(c) & (d)**)

**V. TESTING/SAMPLING**

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

1. Verification of the control equipment VOC Loading rates from EU-ECOAT, EU-GUIDECOAT, and E-TOPCOAT by testing, at owner’s expense, is required according to the following schedule:
  - a. Within 180 days of issuance of this permit if a Control Device VOC Loading test has not been conducted within the previous 5 years, unless the Permittee has submitted an acceptable demonstration that the most recent acceptable test remains valid and representative.
  - b. Within 180 days of making any changes in operating conditions which necessitate reevaluation of the Control Device VOC Loading rates.

Verification of Control Device VOC Loading rates includes the submittal of a complete report of the test results. No less than 30 days prior to testing, a complete testing plan shall be submitted to the AQD District Supervisor. This testing plan must be approved by the Department prior to testing. A complete report of test results must be submitted to the District Supervisor within 60 days following the testing.<sup>2</sup> (**R 336.1225**, **R 336.1702(a)**, **R 336.1910**, **R336.2001**, **R336.2003**, **R336.2004**, **R 336.2810**, **40 CFR 52.21**)

2. On an Annual basis, verification of the VOC emission rate and the system-wide destruction efficiency of the control system made up of three regenerative catalytic oxidizers and one regenerative thermal oxidizer, by testing at owner’s expense, in accordance with Department requirements will be required. No less than 30

days prior to testing, a complete testing plan shall be submitted to the AQD District Supervisor. This testing plan must be approved by the Department prior to testing. A complete report of test results must be submitted to the District Supervisor within 60 days following the testing. The testing frequency may be altered with prior written approval of the AQD District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910, R336.2001, R336.2003, R336.2004, R 336.2810, 40 CFR 52.21)**

3. Within 180 days of issuance of permit to install 138-10 (138-10 was issued November 23, 2010), verification of the overall transfer efficiency of one representative Guidecoat Booth spray zone, one representative Basecoat Booth spray zone, and one representative Clearcoat Booth spray zone, by in-plant testing at owner's expense will be required. No less than 60 days prior to testing, a complete testing plan shall be submitted to the AQD District Supervisor. This testing plan must be approved by the Department prior to testing. A complete report of test results must be submitted to the District Supervisor within 60 days following the testing. In lieu of completing the transfer efficiency testing required by this condition, the permittee may provide an acceptable demonstration to the AQD District Supervisor the most recent transfer efficiency testing done at the facility remains valid and representative.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910, R 336.2001, R 336.2003, R336.2004, R 336.2810, 40 CFR 52.21)**

See Appendix 5

## **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 keep the following records/calculations in a format acceptable to the AQD District Supervisor. The permittee shall compile all required records and complete all required calculations and make them available within 30 days following the end of each calendar month for which records are required to be kept.
  - a. For each material used in FG-FACILITY:
    - i. Material identification;
    - ii. Material VOC content; and,
    - iii. Material usage.
  - b. Number of jobs each calendar month, where a job is defined as a painted vehicle leaving the assembly line (saleable vehicle).
  - c. Calculations showing the FG-FACILITY monthly and annual mass VOC emission rates, in tons per month and tons per 12-month rolling time period, as determined at the end of each calendar month. Calculations must show the capture and control efficiency of each control device used. Calculations must also include a sample calculation based on the production of a single job and that specifies all measured or assumed process parameters (e.g., transfer, capture and control efficiencies, booth splits, etc.) and VOC emissions due to natural gas combustion. Prior to the initial testing, for each controlled section, the design combined capture and control efficiency may be used. Thereafter, values no greater than the most recently tested values may be used.
  - d. Calculations showing the VOC emission rate (lb/job) on a 12-month rolling basis, as determined at the end of each calendar month for the equipment covered by FG-FACILITY.
  - e. Calculations showing the PM-10 mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY after the testing required in FG-FACILITY SC V.3 is completed to develop PM-10 emission factors.
  - f. Records of the total natural gas used in FG-FACILITY during each calendar month and 12-month rolling time period, in cubic feet.
  - g. Calculations showing the NOx mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY.
  - h. Hours of operation for each calendar month and 12-month rolling time period.

All records/calculations shall be kept on file and made available to the Department upon request.<sup>2, b</sup>  
**(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21)**

2. The permittee shall monitor the condition of each particulate control system through weekly visual inspections of each guidecoat, basecoat and clearcoat spraybooth and monthly visual inspections of each final repair spray booth and scuff booth. Alternatively, the use of low flow alarms on water pumps that feed water wash systems may be used on those systems. The permittee shall keep records of visual inspections of each particulate control system and/or the low flow alarms, which include the dates and results of the inspections or alarms and the dates and reasons for resulting repairs. All records shall be kept on file and made available to the Department upon request.<sup>2</sup> **(R 336.1301, R 336.1331, R 336.1901, R 336.910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
3. The permittee shall maintain a record of modifications to any add-on control equipment including any testing and monitoring to demonstrate satisfactory operation upon which compliance with any of the emission limits in FG-FACILITY, SC I.1, 2, 3, and 4 depends.<sup>2</sup> **(R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21)**

<sup>b</sup> In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined VOC emission limit shall be considered compliance with the VOC emission limit established by **R336.1225, R336.1702(a)** and **R336.1901** and also compliance with the VOC emission limit in **40 CFR 60.392**, an additional applicable requirement that has been subsumed within this condition.

## **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.<sup>c</sup> **(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. For each emission unit (EU) and flexible group (FG) included in this permit, the permittee shall submit to the AQD District Supervisor, in an acceptable format, within 30 days following the end of the quarter in which the data was collected, the actual VOC, PM-10, and NOx emission rates for each limit included in the permit. The submittal of PM-10 emissions is not required until after the testing required in FG-FACILITY SC V.3 to develop PM-10 emission factors is completed.<sup>2</sup> **(R 336.1205, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21)**
5. The permittee shall notify the AQD District Supervisor, in writing, of projects authorized by FG-FACILITY SC IX.3 and 4 at least 30 days prior to initialization of the activity. The notification shall include, at a minimum, a description of the type of project and any changes in testing, monitoring, recordkeeping or other compliance evaluation activities.<sup>2</sup> **(R 336.1201)**

<sup>c</sup> In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined VOC emission limit shall be considered compliance with the VOC emission limit established by **R336.1225, R336.1702(a)** and **R336.1901** and also compliance with the VOC emission limit in **40 CFR 60.392**, an additional applicable requirement that has been subsumed within this condition.

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. This permit covers automotive assembly and painting operations for the FRAP International Assembly Plant. Changes to these operations or replacement with a different process type are subject to the requirements of R 336.1201, except as disallowed by R 336.1278 or as allowed by R 336.1279 through R 336.1290 or FG-FACILITY SC IX.3 or 4.<sup>2</sup> **(R 336.1201)**
2. The Department has determined that compliance with the limits listed in FG-FACILITY SC I.1 and 2 provides a level of control that is at least equivalent to and not less stringent than the standards in 40 CFR 60.392, *et seq.* and R 336.1610. Accordingly, compliance with the limitations in this permit meets all applicable requirements of 40 CFR Part 60, Subpart MM and R 336.1610.<sup>2</sup> **(R 336.1610, 40 CFR 60, Subpart MM)**
3. This permit authorizes any activities including projects involving physical changes or changes in the method of operation to existing emission units that do not require an increase in the emissions limits or performance levels specified in FG-FACILITY SC I.1, 2, 3, 4, and 5. Such activities do not require the facility to obtain any federal or state air permits.<sup>2</sup> **(R 336.1201)**
4. This permit authorizes projects involving the installation of new emission units that do not require an increase in the emissions limits or performance levels specified in FG-FACILITY SC I.1, 2, 3, and 4 under the following conditions:
  - a. As a state-only enforceable requirement, the new emission unit will not result in a meaningful change in the nature or quantity of toxic air contaminants emitted from the stationary source. The permittee must demonstrate to the department by testing or calculations that a meaningful change in the nature or quantity of toxic air contaminants has not occurred. The permittee may devise its own method to perform this demonstration subject to approval by the Department. However, if the permittee demonstrates that all toxic air contaminant emissions from a new emissions unit are within the levels specified in R 336.1226 or R 336.1227, a meaningful change in toxic air contaminants has not occurred;
  - b. The new emissions unit will not be a newly constructed or reconstructed major source of hazardous air pollutants as defined in and subject to 40 C.F.R. §63.2 and §63.5(b)(3), National Emission Standard for Hazardous Air Pollutants; and,
  - c. The installation of the new emissions unit will not cause the violation of any applicable air requirement.

A demonstration that the new installation meets these criteria shall be kept on site for the life of the new emission unit and made available to the Department upon request. The permittee must notify the Department of the installation of the new emission unit. This notification must contain the information specified in R 336.1215(3)(c)(i) through (v). Construction of the new emission unit may commence upon submittal of the notice.<sup>2</sup> **(R 336.1201)**
5. The emission limits and performance levels specified in FG-FACILITY SC I.1, 2, 3, 4, and 5 may be reviewed and/or adjusted when newly applicable federal requirements or any other requirement that is enforceable as a practical matter and that the Department, under its State Implementation Plan, may impose on the facility become applicable during the term of the permit that would lower allowable emissions. Adjustments to FG-FACILITY SC I.1, 2, 3, 4, and 5 will be made through a permit revision as of the effective date of the new applicable requirements and will reflect the impact the new applicable requirements will have on the affected emission units. Initial compliance with the adjusted emission limits and performance levels will be demonstrated over the initial compliance period granted by the newly applicable federal requirement.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810)**

6. The permittee may, at any time, request that the Department terminate the flexible emission limit provisions of this permit and issue a traditional permit. In the event of such termination, the requirements of this permit shall remain in effect until a new permit is issued. At that time, the permit conditions for any existing emission unit that has not been modified and to which new requirements have not become applicable will revert to those found in the previous permits. For any new or modified emission unit, or any emission unit for which new requirements have become applicable the permit conditions will reflect requirements contemporaneous with the date of installation, modification or new requirement applicability.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810)**

**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).



## FG-CONTROLS FLEXIBLE GROUP CONDITIONS

**DESCRIPTION**

Three regenerative catalytic oxidizers and one regenerative thermal oxidizer used for control of VOC emissions from the electrocoat system, the paint spray booths, and curing ovens.

**Emission Units:** EU-ECOAT, EU-GUIDECOAT, and EU-TOPCOAT

**POLLUTION CONTROL EQUIPMENT**

Three regenerative catalytic oxidizers and one regenerative thermal oxidizer.

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

1. The permittee shall implement the following:
  - a. The permittee shall implement the malfunction abatement plan for the control system made up of three RCOs and one RTO approved by the AQD District Supervisor consisting of the requirements attached in Appendix 3. The plan shall be updated as necessary to reflect changes in equipment, to implement corrective actions and to address malfunctions. The malfunction abatement plan shall be made available to the Division upon request.<sup>2</sup> **(R 336.702, R 336.1901, R 336.1910, R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21)**
  - b. The permittee shall maintain and implement the Operation and Maintenance Plan (O & M Plan) for FG-Coating consisting of the requirements attached in Appendix 3. The O & M Plan shall be updated as necessary to reflect changes in equipment and monitoring, to implement corrective actions and to address malfunctions. Changes in the O & M Plan from those outlined in Appendix 3 shall be submitted to the AQD District Supervisor for review and approval. All records and activities associated with the O & M Plan shall be made available to the Department upon request.<sup>2</sup> **(R 336.702, R 336.1901, R 336.1910, R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21)**
  - c. The permittee will develop, maintain and implement an outlet concentration monitoring plan as a trending tool to monitor the performance of the control systems. The outlet monitoring plan shall contain the requirements as outlined in Appendix 3. The outlet concentration monitoring plan shall be updated as necessary to reflect changes in equipment and monitoring. Changes in the plan (including requests to modify or discontinue) as outlined in Appendix 3 shall be submitted to the AQD District Supervisor for review and approval. All records and activities associated with the plan shall be made available to the Department upon request.<sup>2</sup> **(R 336.1901, R 336.1910)**

**See Appendix 3**

**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 install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device to continuously monitor and record the temperature of the three regenerative catalytic oxidizer catalyst beds, during operation of EU-ECOAT, EU-GUIDECOAT, and EU-TOPCOAT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2, a</sup> **(R 336.1224, R 336.1225, R 336.702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21, 40 CFR 64.6(c)(1)(i), (ii))**
2. The permittee shall keep, in a satisfactory manner, operating temperature records for each of the three regenerative catalytic oxidizers as required by FG-CONTROLS SC VI.1. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2, a</sup> **(R 336.1224, R 336.1225, R 336.702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21, 40 CFR 64.6(c)(1)(i), (ii))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the regenerative thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of EU-ECOAT, EU-GUIDECOAT, and EU-TOPCOAT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2, a</sup> **(R 336.1224, R 336.1225, R 336.702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)**
4. The permittee shall keep, in a satisfactory manner, combustion chamber temperature records of the regenerative thermal oxidizer as required by FG-CONTROLS SC VI.3. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM)**
5. The permittee shall validate or recalibrate each thermocouple associated with the three regenerative catalytic oxidizers and the regenerative thermal oxidizer on an annual basis. In lieu of validation or recalibration the thermocouples may be replaced. Records of the validation, recalibration, or replacement shall be kept on file and made available to the Department upon request.<sup>2</sup> **(R 336.1213(3), R 336.1224, R 336.1225, R 336.702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21, 40 CFR 60 Subpart MM, 40 CFR 64.6(c)(1)(i), (ii), 40 CFR 64.7(e))**
6. On and after 180 days of issuance of this permit, the permittee shall conduct bypass monitoring for each bypass valve on each control device in operation during production, such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was open and the length of time the bypass was open shall be kept on file and made available to the Department upon request.<sup>2</sup> **(40 CFR 64.3(a)(2))**
7. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely

recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

8. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
  
9. Compliance with FG-CONTROLS SC VI.1 and VI.3 shall be considered compliance with the regenerative thermal/catalytic oxidizer monitoring requirement specified in 40 CFR 60.394 and 40 CFR 60.395 which have been subsumed under this streamlined requirement.<sup>2 a</sup> **(R 336.1213(3))**

<sup>a</sup> In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined VOC monitoring and recordkeeping shall be considered compliance with the VOC monitoring and recordkeeping established by **R336.1225, R336.1702(a)** and **R336.1901** and also compliance with the VOC monitoring and recordkeeping in **40 CFR 60.394 and 40 CFR 60.395**, an additional applicable requirement that has been subsumed within this condition.

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. For the purposes of Compliance Assurance Monitoring (CAM), excursions will be defined as follows: **(40 CFR 64.6(c)(2))**

- a. A monitoring excursion is defined as a failure to properly monitor as required in FG-CONTROLS SC VI.2, VI.4, VI.6, and VI.7.
  - b. A monitoring excursion is defined as failure to properly implement and/or maintain the O&M plan required in FG-CONTROLS SC III.1.
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
  3. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM requirements within the O&M Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

**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).

**FG-AUTO MACT  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts for new automobiles or new light duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.

**EMISSION UNITS:** EU-ECOAT, EU-NGB ADHESIVES & SEALERS, EU-DEADENERS, EU-GLASS INSTALL, EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR, EU-BLACKOUT/WAX, EU-EXPORTWAX, EU-UNDERCOAT, and EU-ASSEMBLY PURGE & CLEAN

**POLLUTION CONTROL EQUIPMENT**

Three regenerative catalytic oxidizers and one regenerative thermal oxidizer

**I. EMISSION LIMIT(S)**

| Pollutant   | Limit                                  | Time Period/<br>Operating Scenario | Equipment   | Monitoring/<br>Testing Method | Underlying<br>Applicable Requirements |
|---|--|------------------------------------|---|-------------------------------|---------------------------------------|
| 1. Organic HAP  | 0.60 lb per GACS <sup>2</sup>          | Calendar month                     | <b>Existing –<br/>FG-AUTO MACT WITH<br/>ECOAT</b>                                 | SC III.2, V.1 &<br>VI.3       | 40 CFR<br>63.3091(a)                  |
| 2. Organic HAP*   | 1.10 lbs per GACS <sup>2</sup>         | Calendar month                     | <b>Existing –<br/>FG-AUTO MACT</b>  | SC III.2, V.1 &<br>VI.3       | 40 CFR<br>63.3091(b)                  |
| 3. Organic HAP  | 0.01 lb per lb of coating <sup>2</sup> | Calendar month                     | <b>New/Reconstructed or<br/>Existing –<br/>EU-NGB ADHESIVES &amp;<br/>SEALERS</b> | SC III.2, V.1 &<br>VI.3       | 40 CFR<br>63.3090(c) or<br>63.3091(c) |
| 4. Organic HAP  | 0.01 lb per lb of coating <sup>2</sup> | Calendar month                     | <b>New/Reconstructed or<br/>Existing –<br/>EU-DEADENERS</b>                       | SC III.2, V.1 &<br>VI.3       | 40 CFR<br>63.3090(d) or<br>63.3091(d) |
| <ul style="list-style-type: none"> <li>• <b>FG-AUTO MACT</b> includes Guidecoat, Topcoat, Final Repair, Blackout, Wax, Undercoat, Glass Bonding Primer, and Glass Bonding Adhesive operations plus all coatings and thinners, except for deadener materials and adhesive and sealers not part of glass bonding systems.</li> <li>• <b>FG-AUTO MACT WITH ECOAT</b> also includes Electrocoat operations in addition to all of the operations of FG-AUTO MACT.</li> <li>• <b>EU-ADHESIVES/SEALERS</b> include only adhesives and sealers that are not part of glass bonding systems.</li> </ul> |  |                                    |   |                               |                                       |
| * Permittee may choose to comply with this limit if the requirements of Condition No. I.5 is met.   |  |                                    |   |                               |                                       |

5. The permittee may choose to comply with either Special Condition numbers I.1 or I.2. The permittee may choose to comply with Special Condition number I.2 only if Electrocoat system (EU-ECOAT) meets either of the following requirements.<sup>2</sup> **(40 CFR 63.3092)**

- a) Each individual material added to the Electrocoat system contains no more than 1.0 percent by weight of any organic HAP and no more than 0.10 percent by weight of any OSHA-defined carcinogenic organic HAP, or
- b) The emissions from all Electrocoat bake ovens are captured and ducted to a CONTROL DEVICE having a minimum destruction or removal efficiency of at least 95 percent (by weight).

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall develop and implement a work practice plan to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by all coating operations for which an emission limit has been established under Special Condition Nos. I.1 through I.4. The work practice plan must specify practices and procedures to ensure that, at a minimum, the following elements are implemented consistent with the requirements of 40 CFR 63.3094: The permittee shall comply with the applicable work practice plans at all times.
  - a) All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
  - b) Spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
  - c) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
  - d) Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
  - e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
  - f) Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in Special Conditions Nos. I.1 through I.4 above must be minimized by addressing:
    - i) Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i);
    - ii) Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii);
    - iii) Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii);
    - iv) Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv);
    - v) Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v);
    - vi) Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi);
    - vii) Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii);
    - viii) Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).

The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g).<sup>2</sup> **(40 CFR 63.3100(c), 40 CFR 63.4493(b) and (c))**

The work practice plan shall not become part of the facility's Renewable Operating Permit (ROP). Revisions to the work practice plan likewise do not represent revisions to the facility's ROP. Copies of the current work practice plan and any earlier plan developed within the past 5 years are required to be made available for inspection and copying by the AQD upon request.<sup>2</sup> **(40 CFR 63.3094)**

2. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits in Special Condition Nos. I.1 through I.4 above,

the permittee shall meet the operating limits specified in Table 1 of 40 CFR 63, Subpart IIII as identified below. The operating limits in Table 1 apply to the emission capture and add-on control systems on the coating operations. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.3167. The operating limits shall be met at all times after they are established, except for periods of startup, shutdown and malfunction.<sup>2</sup> **(40 CFR 63.3093, 40 CFR 63.3100(b) and (d) and Table 1)**

| Add-On Control Device   | Operating Limit  |
|---|--|
| Thermal Oxidizer  | The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a).   |
| Catalytic Oxidizer  | The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(b); and either:<br><br>Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to 40 CFR 63.3167(b)(2); or,<br><br>Develop and implement an inspection and maintenance plan according to 40 CFR 63.3167(b)(4). |
| Regenerative Carbon Adsorber  | The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to 40 CFR 63.3167(c).<br><br>The temperature of the carbon bed after completing each regeneration and any cooling cycle must not exceed the carbon bed temperature limit established according to 40 CFR 63.3167(c).  |
| Condenser   | The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to 40 CFR 63.3167(d).   |
| Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers   | The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).  |
| Emission Capture System that is a Permanent Total Enclosure (PTE), Except for Downdraft Spray Booths, Flash-Off Areas, or Bake Ovens Associated with Downdraft Spray Booths | The direction of the air flow at all times must be into the enclosure; and either:<br><br>The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or,<br><br>The pressure drop across the enclosure must be at least 0.007 inch water, as established in Method 204 of Appendix M to 40 CFR 51.   |
| Emission Capture System that is not a PTE, Except for Downdraft Spray Booths, Flash-Off Areas, or Bake Ovens Associated with Downdraft Spray Booths                         | The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.3167(f).   |

3. The permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) in accordance with 40 CFR 63.6(e)(3). This plan must address the startup, shutdown and corrective actions in the event of a malfunction of any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.<sup>2</sup> **(40 CFR 63.3100(f))**

4. The permittee shall operate and maintain FG-AUTO MACT including any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends according to the provisions in 40 CFR 63.6(e)(1)(i). (40 CFR 63.3100(d))<sup>2</sup>
5. The permittee shall maintain a log detailing the operation and maintenance of any emission capture system, add-on control device, or continuous parameter monitor upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends. The log shall cover the period between the compliance date specified in 40 CFR 63.3083 and the date when the initial emission capture system and add-on control device performance tests have been completed, as specified in 40 CFR 63.3160.<sup>2</sup> **(40 CFR 63.3100(e))**

#### **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), 40 CFR 63.3130, 40 CFR 63.3131)**

1. The permittee shall perform the applicable performance tests and compliance demonstrations in accordance with 40 CFR 63.3150-3152, 40 CFR 63.3160-3161, 40 CFR 63.3163-3168, 40 CFR 63.3170-3171, and 40 CFR 63.3173.<sup>2</sup> **(40 CFR, Part 63, Subpart IIII)**
2. The permittee may rely upon the results of capture, destruction or transfer efficiency tests that have been previously conducted upon written approval from the AQD District Supervisor. Any such previous tests must meet the criteria identified in 40 CFR 63.3160(c)(1) through (3).<sup>2</sup> **(40 CFR 63.3160)**
3. The permittee shall determine the mass fraction of each organic HAP for each material used according to the procedures established under 40 CFR 63.3151(a)(1) through (5). The permittee may use USEPA Method ALT-017 as an alternative for any material used, after demonstrating that its use as an alternative test methodology for that material, has been approved by the USEPA pursuant to the requirements of 40 CFR 63.3151(a)(3) and 40 CFR 63.7.<sup>2</sup> **(40 CFR 63.7, 40 CFR 63.3151)**

See Appendix 5

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

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.3131)**

1. The permittee shall compile all required records and complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the end of the calendar month following each compliance period unless otherwise specified in any monitoring/recordkeeping condition.<sup>2</sup> **(R 336.1213(3))**
2. The permittee shall conduct an initial compliance demonstration for the initial compliance period described in 40 CFR 63.3150-3151, 40 CFR 63.3160-3161, and 40 CFR 63.3170-3171. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.3083 and ends on the last day of the month following the compliance date. If the initial date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month.<sup>2</sup> **(40 CFR 63.3150, 40 CFR 63.3160, 40 CFR 63.3170, 40 CFR 63.3083(a) and (b))**
3. The permittee shall install, operate and maintain each Continuous Parameter Monitoring System (CPMS) according to the requirements of 40 CFR 63.3168(a). If the capture system contains a bypass line, the permittee shall comply with the requirements of 40 CFR 63.3168(b).<sup>2</sup> **(40 CFR 63.3168)**
4. The permittee shall keep all records as required by 40 CFR 63.3130 in the format and timeframes outlined in 40 CFR 63.3131.<sup>2</sup> **(40 CFR 63.3152(c), 40 CFR 63.3163(j))**
5. The permittee shall maintain, at a minimum, the following records as of the applicable compliance date, for each compliance period:



- a) A copy of each notification and report that is submitted to comply with 40 CFR, Part 63, Subpart IIII and the documentation supporting each notification and report.<sup>2</sup> **(40 CFR 63.3130(a))**
  - b) A current copy of information provided by materials suppliers or manufactures, such as manufacturer’s formulation data, or test data used to determine the mass fraction of organic HAP for each coating, thinner and cleaning material, the density for each coating and thinner, and the volume fraction of coating solids for each coating.<sup>2</sup> **(40 CFR 63.3130(b))**
  - c) For each coating or thinner used in FG-AUTO MACT or FG-AUTO MACT WITH ECOAT, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids.<sup>2</sup> **(40 CFR 63.3130(c))**
  - d) For each material used in EU-DEADENERS and EU-NGB SEALERS & ADHESIVES, the mass used in each month and the mass organic HAP content.<sup>2</sup> **(40 CFR 63.3130(c))**
  - e) Calculations of the organic HAP emission rate for FG-AUTO MACT or FG-AUTO MACT WITH ECOAT in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in Special Condition I.5.a., a record of the weight fraction of each organic HAP in each material added to the Electrocoat system. These calculations and records must include all raw data, algorithms, and intermediate calculations. If the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22), is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained.<sup>2</sup> **(40 CFR 63.3130(c), 40 CFR 63.3163, 40 CFR 63.3173)**
  - f) Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for EU-DEADENERS and EU-NGB SEALERS & ADHESIVES.<sup>2</sup> **(40 CFR 63.3130(c), 40 CFR 63.3152)**
  - g) The name, volume, mass fraction organic HAP content and density of each cleaning material used.<sup>2</sup> **(40 CFR 63.3130(d) - (f))**
  - h) Any additional records pertaining to deviations; startup, shutdown or malfunctions; emission capture systems; performance testing; capture and control efficiency determinations; transfer efficiency determinations; work practice plans; and design and operation of control and monitoring systems for any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends, pursuant to 40 CFR 63.3130(g) through (o).<sup>2</sup> **(40 CFR 63.3130(g) – (o))**
  - i) Records pertaining to the design and operation of control and monitoring systems for any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors.<sup>2</sup> **(40 CFR 63.3130(o))**
6. For any coating operation(s) using add-on controls, the permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 of 40 CFR, Part 63, Subpart IIII for any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends pursuant to 40 CFR 63.3163 and 40 CFR 63.3173 using the method(s) described below:<sup>2</sup> **(40 CFR 63.3163, 40 CFR 63.3173 and Table 1)**

| Add-On Control Device | Operating Limit  | Continuous Compliance Demonstration Method   |
|-----------------------|--|--|
| Thermal Oxidizer      | The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a). | a. Collect the combustion temperature data according to 40 CFR 63.3168(c);<br>b. Reduce the data to 3-hour block averages; and<br>c. Maintain the 3-hour average combustion temperature at or above temperature limit. |

| Add-On Control Device        | Operating Limit   | Continuous Compliance Demonstration Method  |
|------------------------------|---|---|
| Catalytic Oxidizer           | <p>The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(b); and either:</p> <p>Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to 40 CFR 63.3167(b)(2); or,</p> <p>Develop and implement an inspection and maintenance plan according to 40 CFR 63.3167(b)(4).</p> | <p>a. Collect the temperature data according to 40 CFR 63.3168(c);</p> <p>b. Reduce the data to 3-hour block averages; and</p> <p>c. Maintain the 3-hour average temperature before the catalyst bed at or above the temperature limit.</p> <p>a. Collect the temperature data according to 40 CFR 63.3168(c);</p> <p>b. Reduce the data to 3-hour block averages; and</p> <p>c. Maintain the 3-hour average temperature difference at or above the temperature difference limit; or</p> <p>a. Maintaining an up-to-date inspection maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by 40 CFR 63.3167(b)(4), take corrective action as soon as practicable consistent with the manufacturer’s recommendations.</p> |
| Regenerative Carbon Adsorber | <p>The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to 40 CFR 63.3167(c).</p> <p>The temperature of the carbon bed after completing each regeneration and any cooling cycle must not exceed the carbon bed temperature limit established according to 40 CFR 63.3167(c).</p>  | <p>a. Measure the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle according to 40 CFR 63.3168(d); and</p> <p>b. Maintain the total regeneration desorbing gas mass flow at or above the mass flow limit.</p> <p>a. Measure the temperature of the carbon bed after completing each regeneration and any cooling cycle according to 40 CFR 63.3168(d); and</p> <p>b. Operate the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.</p>   |
| Condenser                    | <p>The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to 40 CFR 63.3167(d).</p>   | <p>a. Collect the condenser outlet (product side) gas temperature according to 40 CFR 63.3168(e);</p> <p>b. Reduce the data to 3-hour block averages; and</p>   |

| Add-On Control Device   | Operating Limit  | Continuous Compliance Demonstration Method  |
|---|--|---|
|   |  | c. Maintain the 3-hour average gas temperature at the outlet at or below the temperature limit.   |
| Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers   | The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).  | a. Collect the temperature data according to 40 CFR 63.3168(f);<br>b. Reduce the data to 3-hour block averages; and<br>c. Maintain the 3-hour average temperature at or above the temperature limit.  |
| Emission Capture System that is a Permanent Total Enclosure (PTE), Except for Downdraft Spray Booths, Flash-Off Areas, or Bake Ovens Associated with Downdraft Spray Booths | The direction of the air flow at all times must be into the enclosure; and either:<br><br>The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or,<br><br>The pressure drop across the enclosure must be at least 0.007 inch water, as established in Method 204 of Appendix M to 40 CFR 51. | a. Collect the direction of air flow, and either the facial velocity of air through all natural draft openings according to 40 CFR 63.3168(g)(1) or the pressure drop across the enclosure according to 40 CFR 63.3168(g)(2); and<br>b. Maintain the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times. |
| Emission Capture System that is not a PTE, Except for Downdraft Spray Booths, Flash-Off Areas, or Bake Ovens Associated with Downdraft Spray Booths                         | The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.3167(f).   | a. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to 40 CFR 63.3168(g);<br>b. Reducing the data to 3-hour block averages; and<br>c. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.  |

7. Permittee shall monitor or secure the valve or closure mechanism controlling each bypass line for each capture system upon which compliance with any of the emission limits in Special Condition numbers I.1 through I.4 depends in a non-bypass mode such that the valve or closure mechanism cannot be opened without creating a record that it was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the following:

- a) Flow control position indicator requirements pursuant to 40 CFR 63.3168(b)(1)(i);
- b) Car-seal or lock-and-key valve closures requirements pursuant to 40 CFR 63.3168(b)(1)(ii);
- c) Valve closure monitoring requirements pursuant to 40 CFR 63.3168(b)(1)(iii);
- d) Automatic shutdown system requirements pursuant to 40 CFR 63.3168(b)(1)(iv).

If any bypass line is opened, a description of why the line was opened and the length of time it remained open must be included in the semi-annual compliance reports required in Special Condition number 12.18.<sup>2</sup> **(40 CFR 63.3168(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. **(40 CFR 63.3120(a)(1), R336.1213(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 submit all semiannual compliance reports as required by 40 CFR 63.3120(a). The first time period covered by these reports shall be shortened so as to end on either June 30 or December 31, whichever comes first. These reports shall be due March 15 for the reporting period July 1 to December 31 and September 15 for the reporting period January 1 to June 30.<sup>2</sup> **(40 CFR 63.3120(a))**
5. The Permittee shall submit applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), as specified in 40 CFR 63.3110.<sup>2</sup> **(40 CFR, Part 63, Subparts A and IIII)**
6. For any coating operation(s) using add-on controls, the permittee shall submit all performance test reports for emission capture systems and add-on control devices, and reports of transfer efficiency tests as required by 40 CFR 63.3120(b).<sup>2</sup> **(40 CFR 63.3120(b))**
7. If an emission capture system or add-on control device is used to comply with any of the emission limits in Special Condition numbers I.1 through I.4, and a startup, shutdown, or malfunction occurs during the semiannual reporting period, the permittee shall submit a SSM report as specified in 40 CFR 63.3120(c).<sup>2</sup> **(40 CFR 63. 3120(c), 40 CFR 63.10(d))**

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart IIII for Surface Coating of Automobiles and Light Duty Trucks by the initial compliance date.<sup>2</sup> **(40 CFR, Part 63, Subparts A and IIII)**

**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).

**FG-OLD FACILITY  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

The affected source is each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is located at, or is part of a major source of hazardous air pollutant (HAP) emissions. The affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to this subpart. Equipment that is part of an affected source under another NESHAP is excluded from the affected source. **(40 CFR 63.2338(c))**

These conditions specifically cover existing (construction pre dates April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles.

**Emission Unit:** EU-TANKS

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

1. For each existing storage tank with a capacity greater than 5,000 gallons but less than 50,000 gallons, the permittee shall comply with the requirements of 63.2343(b).<sup>2</sup> **(40 CFR 63.2343(b))**
2. For each new storage tank with a capacity greater than 5,000 gallons but less than 10,000 gallons, the permittee shall comply with the requirements of 63.2343(b).<sup>2</sup> **(40 CFR 63.2343(b))**

**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

**See Appendix 5**

**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 keep documentation, including a record of the annual average true vapor pressure of the total Table 1 Organic liquid, that verifies the storage tank is not required to be controlled under this subpart. The documentation shall be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review.<sup>2</sup> **(63.2343(b)(3))**

**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 submit the following information in either the Notification of Compliance Status, according to the schedule in Table 12 to this subpart, or in your first Compliance report according to the schedule in 63.2386(b), whichever occurs first.<sup>2</sup> **(63.2343(b)(1))**
  - a) Company name and address.
  - b) A statement by a responsible official, including the official's name, title and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate and complete.
  - c) Date of report and beginning and ending dates of the reporting period.
  - d) A list of all storage tanks greater than 5,000 gallons that are part of the affected source but not subject to any of the emission limitations, operating limits, or work practice standards of this subpart.
5. The permittee shall submit subsequent compliance reports according to the schedule in 63.2386(b) or in conjunction with the reporting requirements in this ROP whenever any of the following events occur as applicable:<sup>2</sup> **(63.2343(b)(2))**
  - a) Any storage tank became subject to control under this subpart EEEE.
  - b) Any storage tank greater than 5,000 gallons became part of the affected source, but is not subject to any emission limitations, operating limits or work practice standards of this subpart.

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart EEEE as they apply to FG-OLDFACILITY. The permittee may choose an alternative compliance method not listed in FG-OLDFACILITY by providing the appropriate notifications required under 40 CFR 63.9(j), maintaining a log required by 40 CFR 70.6(a)(9), and by complying with all applicable provisions required by Subpart EEEE for the compliance option chosen.<sup>2</sup> **(40 CFR Part 70.6(a)(9), 40 CFR Part 63.9(j), 40 CFR Part 63, Subparts A and EEEEE)**

**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).

**FG-PLASTIC MACT  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR, Part 63, Subpart PPPP, 63.4481(a)(2) to (5). Surface coating is defined by 40 CFR 63.4481 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating.

**Emission Unit:** EU-PLASTIC, EU-PLASTIC PURGE & CLEAN

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

| Pollutant      | Limit                            | Time Period/<br>Operating<br>Scenario | Equipment   | Monitoring/<br>Testing Method   | Underlying<br>Applicable<br>Requirements |
|----------------|----------------------------------|---------------------------------------|---|---------------------------------|--|
| 1. Organic HAP | 0.16 lb per lb of coating solids | 12-month rolling time period *        | New or Reconstructed - General Use Coating                | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(a)(1)                     |
| 2. Organic HAP | 0.26 lb per lb of coating solids | 12-month rolling time period *        | New or Reconstructed - Automotive Lamp Coating            | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(a)(2)                     |
| 3. Organic HAP | 0.22 lb per lb of coating solids | 12-month rolling time period *        | New or Reconstructed - Thermoplastic Olefin (TPO) Coating | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(a)(3)                     |
| 4. Organic HAP | 1.34 lb per lb of coating solids | 12-month rolling time period *        | New or Reconstructed - Assembled On-road Vehicle Coating  | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(a)(4)                     |
| 5. Organic HAP | 0.16 lb per lb of coating solids | 12-month rolling time period *        | Existing - General Use Coating                            | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(b)(1)                     |
| 6. Organic HAP | 0.45 lb per lb of coating solids | 12-month rolling time period *        | Existing - Automotive Lamp Coating                        | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(b)(2)                     |
| 7. Organic HAP | 0.26 lb per lb of coating solids | 12-month rolling time period *        | Existing – Thermoplastic Olefin (TPO) Coating             | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(b)(3)                     |
| 8. Organic HAP | 1.34 lb per lb of coating solids | 12-month rolling time period *        | Existing - Assembled On-road Vehicle Coating              | SC V.1, V.2, VI.1 through VI.10 | 40 CFR 63.4490(b)(4)                     |

\* As determined at the end of each calendar month.

9. The permittee shall determine whether the organic HAP emission rate is equal to or less than the applicable emission limits in 40 CFR 63.4490 using at least one of the following three options, which are listed in 40 CFR 63.4491(a) through (c):
  - a) Compliant material option,
  - b) Emission rate without add-on controls option, or
  - c) Emission rate with add-on controls option.

The permittee shall include all coatings, thinners and/or other additives, and cleaning materials used when determining the emission rate. **(40 CFR 63.4491)**



10. Any coating operation(s) using the compliant material option or the emission rate without add-on controls option shall be in compliance with the applicable emission limits in 40 CFR 63.4490 at all times. **(40 CFR 63.4500(a)(1))**
11. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the applicable emission limits at all times except during periods of startup, shutdown, and malfunction. **(40 CFR 63.4500(a)(2)(i))**
12. If the surface coating operation(s) meet the applicability criteria of more than one of the subcategory emission limits specified in 40 CFR 63.4490(a) or (b), the permittee may comply separately with each subcategory emission limit, or comply using one of the alternatives in 40 CFR 63.4490(c)(1) or (2). **(40 CFR 63.4490(c))**

**II. MATERIAL LIMIT(S)**

For the compliant materials option, the permittee shall meet the material limits specified in the following table.

| Material                        | Limit            | Time Period/<br>Operating Scenario | Equipment  | Monitoring/<br>Testing Method | Underlying<br>Applicable Requirements |
|---------------------------------|------------------|------------------------------------|--|-------------------------------|---------------------------------------|
| 1. Each Thinner and/or Additive | No Organic HAP * | Continuous                         | Each Coating Operation using Compliant Material Option | SC VI.1, VI.2, VI.3, VI.5     | 40 CFR 63.4491(a)                     |
| 2. Each Cleaning Material       | No Organic HAP * | Continuous                         | Each Coating Operation using Compliant Material Option | SC VI.1, VI.2, VI.3, VI.5     | 40 CFR 63.4491(a)                     |

\* Determined according to 40 CFR 63.4541(a).

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

1. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall meet the operating limits specified in Table 1 of 40 CFR, Part 63, Subpart PPPP as identified below. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.4567. **(40 CFR 63.4492(b) and Table 1)**

| Add-on Control Device                       | Operating Limit   |
|---|---|
| Thermal oxidizer                            | a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.4567(a).   |
| Catalytic oxidizer                          | a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to 40 CFR 63.4567(b); and either<br>b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to 40 CFR 63.4567(b)(2); or<br>c. Develop and implement an inspection and maintenance plan according to 40 CFR 63.4567(b)(4). |
| Regenerative carbon absorber                | a. The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to 40 CFR 63.4567(c); and<br>b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to 40 CFR 63.4567(c).   |
| Condenser                                   | a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to 40 CFR 63.4567(d).   |
| Concentrators, including zeolite wheels and | a. The average gas temperature of the desorption concentrate stream in any 3-hour   |

| Add-on Control Device  | Operating Limit  |
|--|--|
| rotary carbon absorbers.   | period must not fall below the limit established according to 40 CFR 63.4567(e); and<br>b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to 40 CFR 63.4567(e).   |
| Emission capture system that is a PTE according to 40 CFR 63.4565(a).            | a. The direction of the air flow at all times must be into the enclosure; and either<br>b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or<br>c. The pressure drop across the enclosure must be at least 0.007 inch H <sub>2</sub> O, as established in Method 204 of Appendix M to 40 CFR 51. |
| Emission capture system that is <u>not</u> a PTE according to 40 CFR 63.4565(a). | a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.4567(f).  |

2. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall develop and implement a work practice plan to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s). The work practice plan shall specify practices and procedures to ensure at a minimum the following elements are implemented:
  - a) All organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers. **(40 CFR 63.4493(b)(1))**
  - b) Spills of organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized. **(40 CFR 63.4493(b)(2))**
  - c) Organic HAP containing coatings, thinners and/or other additives, cleaning materials and waste materials must be conveyed from one location to another in closed containers or pipes. **(40 CFR 63.4493(b)(3))**
  - d) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents. **(40 CFR 63.4493(b)(4))**
  - e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment. **(40 CFR 63.4493(b)(5))**

The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g). **(40 CFR 63.4493(c))**
3. If the affected source uses an emission capture system and add-on control device, the permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) according to the provisions of 40 CFR 63.6(e)(3). This SSMP must address the startup, shutdown and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. **(40 CFR 63.4500(c))**
4. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the operating limits for emission capture systems and add-on control devices required by 40 CFR 63.4492 at all times except during periods of startup, shutdown, and malfunction. **(40 CFR 63.4500(a)(2)(ii))**
5. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the work practice standards in 40 CFR 63.4493 at all times. **(40 CFR 63.4500(a)(2)(iii))**

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

1. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall not operate FG-PLASTIC MACT unless the Thermal Oxidizers are installed, maintained, and operated in a satisfactory manner. **(40 CFR 63.4492(b))**

## **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.4531)**

1. The permittee shall determine the mass fraction of organic HAP for each material used, the mass fraction of coating solids for each coating, and the density of each material used in accordance with 40 CFR 63.4541, 40 CFR 63.4551, and/or 40 CFR 63.4561. **(40 CFR 63.4541, 40 CFR 63.4551, 40 CFR 63.4561)**
2. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall conduct each performance test required by 40 CFR 63.4560 according to the requirements in 40 CFR 63.7(e)(1) and under the conditions in 40 CFR 63.4564(a)(1) and (2), unless a waiver of the performance test is obtained in accordance with 40 CFR 63.7(h). **(40 CFR 63.4564(a))**
3. The permittee shall conduct each performance test of an emission capture system and add-on control device to determine capture efficiency and emission destruction or removal efficiency, according to the requirements in 40 CFR 63.4565 and 40 CFR 63.4566. **(40 CFR 63.4564(b))**

See Appendix 5

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.4531)**

1. The permittee shall conduct an initial compliance demonstration for the initial compliance period according to the requirements in 40 CFR 63.4541, 40 CFR 63.4551, or 40 CFR 63.4561. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.4483 and ends on the last day of the 12<sup>th</sup> month following the compliance date. If the compliance date occurs on any day other than the first of the month, then the compliance period extends through that month plus the next 12 months. **(40 CFR 63.4483, 40 CFR 63.4540, 40 CFR 63.4550, 40 CFR 63.4560)**
2. The permittee shall keep all records required by 40 CFR 63.4530 in the format and timeframes outlined in 40 CFR 63.4531. **(40 CFR 63.4542(d), 40 CFR 63.4552(d), 40 CFR 63.4563(j))**
3. The permittee shall maintain, at a minimum, the following records for each compliance period:
  - a) A copy of each notification and report that is submitted to comply with 40 CFR, Part 63, Subpart PPPP, and the documentation supporting each notification report. **(40 CFR 63.4530(a))**
  - b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density of each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. **(40 CFR 63.4530(b))**
  - c) A list the coating operations on which each compliance option was used, and the beginning and ending dates and times for each compliance option used. **(40 CFR 63.4530(c)(1))**
  - d) For the compliant materials option, the calculation of the organic HAP content for each coating, using Equation 1 of 40 CFR 63.4541. **(40 CFR 63.4530(c)(2))**
  - e) For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or additives, and cleaning materials used each month using Equations 1, 1A through 1C and 2 of 40 CFR 63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of 40 CFR 63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.4551. **(40 CFR 63.4530(c)(3))**

- f) For the emission rate with add-on controls option, the calculations specified in 40 CFR 63.4530(c)(4)(i) through (v). **(40 CFR 63.4530(c)(4))**
- g) The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the compliant material option is used for all coatings at the affected source, the permittee may maintain purchase records for each material used rather than a record of the mass used. **(40 CFR 63.4530(d))**
- h) The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period. **(40 CFR 63.4530(e))**
- i) The mass fraction of coating solids for each coating used during each compliance period. **(40 CFR 63.4530(f))**
- j) The information specified in 40 CFR 63.4530(g)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.4551(e)(4). **(40 CFR 63.4530(g))**
- k) The date, time, and duration of each deviation. **(40 CFR 63.4530(h))**
- l) For the emission rate with add-on controls option, records specified in 40 CFR 63.4530(i)(1) through (8). **(40 CFR 63.4530(i))**

4. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 to 40 CFR, Part 63, Subpart PPPP using the applicable method(s) described below: **(40 CFR 63.4563(c))**

| Add-on Control Device | Operating Limit   | Continuous Compliance Demonstration Method  |
|-----------------------|---|---|
| Thermal oxidizer      | a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.4567(a).   | i. Collect the combustion temperature data according to 40 CFR 63.4568(c);<br>ii. Reduce the data to 3-hour block averages; and<br>iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.   |
| Catalytic oxidizer    | a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to 40 CFR 63.4567(b); and either                            | i. Collect the temperature data according to 40 CFR 63.4568(c);<br>ii. Reduce the data to 3-hour block averages; and<br>iii. Maintain the 3-hour average temperature before the catalyst bed at or above the temperature limit. |
|                       | b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to 40 CFR 63.4567(b)(2); or | i. Collect the temperature data according to 40 CFR 63.4568(c);<br>ii. Reduce the data to 3-hour block averages; and<br>iii. Maintain the 3-hour average temperature difference at or above the temperature difference limit.   |
|                       | c. Develop and implement an inspection and maintenance plan according to 40   | i. Maintain an up-to-date inspection and maintenance plan, records of annual catalyst   |

| Add-on Control Device   | Operating Limit  | Continuous Compliance Demonstration Method   |
|---|--|--|
|   | CFR 63.4567(b)(4).   | activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during the monthly or annual inspection required by 40 CFR 63.4567(b)(4), take corrective action as soon as practicable consistent with the manufacturer's specifications.  |
| Regenerative carbon absorber  | <p>a. The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to 40 CFR 63.4567(c); and</p> <p>b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to 40 CFR 63.4567(c).</p> | <p>i. Measure the total regeneration desorbing gas (e.g. steam or nitrogen) mass flow for each regeneration cycle according to 40 CFR 63.4568(d); and</p> <p>ii. Maintain the total regeneration desorbing gas mass flow at or above the mass flow limit.</p> <p>i. Measure the temperature of the carbon bed after completing each regeneration and any cooling cycle according to 40 CFR 63.4568(d); and</p> <p>ii. Operate the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.</p> |
| Condenser   | a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to 40 CFR 63.4567(d).  | <p>i. Collect the condenser outlet (product side) gas temperature according to 40 CFR 63.4568(e);</p> <p>ii. Reduce the data to 3-hour block averages; and</p> <p>iii. Maintain the 3-hour average gas temperature at the outlet at or below the temperature limit.</p>  |
| Concentrators, including zeolite wheels and rotary carbon absorbers.  | <p>a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to 40 CFR 63.4567(e); and</p> <p>b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to 40 CFR 63.4567(e).</p>  | <p>i. Collect the temperature data according to 40 CFR 63.4568(f);</p> <p>ii. Reduce the data to 3-hour block averages; and</p> <p>iii. Maintain the 3-hour average temperature at or above the temperature limit.</p> <p>i. Collect the pressure drop data according to 40 CFR 63.4568(f);</p> <p>ii. Reduce the pressure drop data to 3-hour block averages; and</p> <p>iii. Maintain the 3-hour average pressure drop at or above the pressure drop limit.</p>  |
| Emission capture system that is a PTE according to 40 CFR 63.4565(a). | <p>a. The direction of the air flow at all times must be into the enclosure; and either</p> <p>b. The average facial velocity of air through all natural draft openings in the</p>   | i. Collect the direction of air flow, and either the facial velocity of air through all natural draft openings according to 40 CFR 63.4568(g)(1) or the pressure drop across the enclosure   |

| Add-on Control Device  | Operating Limit   | Continuous Compliance Demonstration Method  |
|--|---|---|
|  | enclosure must be at least 200 feet per minute; or<br><br>c. The pressure drop across the enclosure must be at least 0.007 inch H <sub>2</sub> O, as established in Method 204 of Appendix M to 40 CFR, Part 51.  | according to 40 CFR 63.4568(g)(2); and<br><br>ii. Maintain the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintain the direction of air flow into the enclosure at all times.  |
| Emission capture system that is <u>not</u> a PTE according to 40 CFR 63.4565(a). | a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.4567(f). | i. Collect the gas volumetric flow rate or duct static pressure for each capture device according to 40 CFR 63.4568(g);<br><br>ii. Reduce the data to 3-hour block averages; and<br><br>iii. Maintain the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit. |

5. For each coating used for the compliant coating option, the permittee shall demonstrate continuous compliance with the emission limit in 40 CFR 63.4490, for each compliance period, using Equation 1 of 40 CFR 63.4541. For each thinner and cleaning material used, the permittee shall determine continuous compliance according to 40 CFR 63.4541(a). **(40 CFR 63.4542)**
6. For any coating operation or group of coating operations using the emission rate without add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in 40 CFR 63.4490, for each compliance period according to 40 CFR 63.4551(a) through (g). **(40 CFR 63.4552)**
7. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit, for each compliance period according to the procedures in 40 CFR 63.4561. **(40 CFR 63.4563)**
8. During the performance test required by 40 CFR 63.4560, the permittee shall perform the applicable monitoring and recordkeeping in accordance with 40 CFR 63.4567 to establish the emission capture system and add-on control device operating limits required by 40 CFR 63.4492. **(40 CFR 63.4567)**
9. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall install, operate, and maintain each Continuous Parameter Monitoring System (CPMS) according to the requirements of 40 CFR 63.4568(a). If the capture system contains a bypass line, the permittee shall comply with the requirements of 40 CFR 63.4568(b). **(40 CFR 63.4568)**
10. The permittee must apply to the USEPA for approval of alternative monitoring under 40 CFR 63.8(f), if using an add-on control device other than those listed in Table 1 of 40 CFR, Part 63, Subpart PPPP, or to monitor an alternative parameter and comply with a different operating limit. **(40 CFR 63.4492(c))**

**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. For the compliant material option, the use of any coating, thinner or cleaning material which does not meet the criteria specified in 40 CFR 63.4542(a) is a deviation that must be reported as specified in 40 CFR 63.4510(c)(6) and 40 CFR 63.4520(a)(5) **(40 CFR 63.4542(b))**
5. For the emission rate without add-on controls, if the organic HAP emission rate for any compliance period exceeds the applicable emission limit specified in 40 CFR 63.4490, the permittee shall report this as a deviation as specified in 40 CFR 63.4510(c)(6) and 40 CFR 63.4520(a)(6). **(40 CFR 63.4552(b))**
6. For the emission rate with add-on controls option, the permittee shall report the following as deviations as specified in 40 CFR 63.4510(c)(6) and 40 CFR 63.4520(a)(7):
  - a) The organic HAP emission rate for any compliance period exceeds the applicable emission limit specified in 40 CFR 63.4490; **(40 CFR 63.4563(b))**
  - b) An operating parameter is out of the allowed range; **(40 CFR 63.4563(c)(1))**
  - c) Any control system by-pass line, for which liquid-liquid material balances are not carried out, is opened; **(40 CFR 63.4563(d))**
  - d) Deviations from work practice standards occur. **(40 CFR 63.4563(e))**
7. The permittee shall submit the applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), an initial notification and a notification of compliance status as specified in 40 CFR 63.4510. **(40 CFR, Part 63, Subparts A and PPPP)**
8. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.4520. Each semiannual compliance report shall identify which coating operation(s) used each compliance option, and if there were no deviations from the emission limitations in 40 CFR 63.4490, include a statement that the coating operations were in compliance. **(40 CFR 63.4520, 40 CFR 63.4542(c), 40 CFR 63.4552(c), 40 CFR 63.4563(f))**
9. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall submit all performance test reports for emission capture systems and add-on control devices. **(40 CFR 63.4520(b))**
10. If the emission rate with add-on controls option is used and a startup, shutdown, or malfunction occurs during the semiannual reporting period, the permittee shall submit a SSM report as specified in 40 CFR 63.4520(c). **(40 CFR 63.4520(c), 40 CFR 63.10(d))**

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart PPPP for Surface Coating of Plastic Parts and Products by the initial compliance date. **(40 CFR, Part 63, Subparts A and PPPP)**

**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>FG-BOILER MACT<br/>FLEXIBLE GROUP CONDITIONS</b> |
|---|

**DESCRIPTION**

This Flexible Group establishes the national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP as found in 40 CFR 63, Subpart DDDD D.

**Emission Units:** EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall conduct the initial tune-up of the affected equipment no later than January 31, 2016, and annually (no more than 13 months after the previous tune-up) for units greater than or equal to 10 MMBtu/hr and biannually (no more than 25 months after the previous tune-up) for units greater than 5 MMBtu/hr and less than 10 MMBtu/hr thereafter to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (a)(10)(vi). These frequencies do not apply if the emission units have continuous oxygen trim systems that maintain an optimum air to fuel ratio, as defined in 63.7575. **(40 CFR 63.7510(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12))**
2. The permittee shall conduct the initial tune-up of the affected equipment no later than January 31, 2016, and every five years (no more than 61 months after the previous tune-up) for units less than or equal to 5 MMBtu/hr or if the emission units have continuous oxygen trim systems that maintain an optimum air to fuel ratio, as defined in 63.7575 thereafter to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (a)(10)(vi). These frequencies do not apply if the emission units have continuous oxygen trim systems that maintain an optimum air to fuel ratio, as defined in 63.7575. **(40 CFR 63.7510(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12))**
3. For an existing boiler or process heater located at a major source facility, not including limited use units, the permittee must have a one-time energy assessment performed by a qualified energy assessor as required in Table 3 of 40 CRF Part 63, Subpart DDDDD. **(40 CFR Part 63, Subpart DDDDD, Table 3)**
4. The permittee, at all times, must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

**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))**

NA

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semi-annual 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. As specified in 40 CFR 63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an initial Notification not later than 15 days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
5. The permittee shall submit compliance reports as required by 40 CFR 63.7550. The first time period covered by these reports shall be shortened so as to end on either June 30 or December 31, whichever date is the first date that occurs at least 180 days (or 1, 2, or 5 years, as applicable, if submitting an annual, biennial, or 5 year compliance report) after the compliance date that is specified for you source in 40 CFR 63.7495. **(40 CFR 63.7550)**

See Appendix 8-1

**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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of 40 CFR Part 63, Subparts A and DDDDD. **(40 CFR Part 63, Subparts A and DDDDD)**

**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).

**FG-CIRICEMACT  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE less than 500 bhp.

**Emission Units:** EU-UTFPH-SOUTH, EU-UTFPH-MIDDLE, EU-UTFPH-NORTH, EUMSCFIREPUMP, EU-PAINTEMGEN

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. Each engine in FG-CIRICEMACT shall be installed, maintained, and operated in a satisfactory manner. A list of recommended work practice standards as specified in 40 CFR 63.6602 and Table 2c, Item 6 or the permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. The following are the recommended work practices specified in 40 CFR Part 63 Subpart ZZZZ Table 2c:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2,
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63 Subpart ZZZZ Table 2c, Item 6)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of 40 CFR Part 63 Subpart ZZZZ. **(40 CFR 63.6625(j))**
3. The permittee shall install, maintain and operate each engine in FG-CIRICEMACT and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6605, 40 CFR 63.6625(e))**

4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine in FG-CIRICEMACT to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**
5. The permittee shall not allow each engine in FG-CIRICEMACT to exceed 100 hours per calendar year for maintenance checks and readiness testing and emergency demand response. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2)(i))**
6. The permittee may operate each engine in FG-CIRICEMACT up to 50 hours per calendar year for non-emergency situations, but those hours are to be counted towards the 100 hours per calendar year for maintenance and testing and emergency demand response, as allowed in 40 CFR 63.6640(f)(2). **(40 CFR 63.6640(f)(3))**

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

1. The permittee shall install a non-resettable hour meter on each engine in FG-CIRICEMACT **40 CFR 63.6625(f))**

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

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

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Subpart ZZZZ Table 2c, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(j))**

See Appendix 5

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

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

1. For each engine in FG-CIRICEMACT the permittee shall keep in a satisfactory manner, records of the occurrence and duration of each malfunction of operation or the air pollution control monitoring equipment. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a)(2), 40 CFR 63.6660)**
2. For each engine in FG-CIRICEMACT the permittee shall keep in a satisfactory manner, records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a)(5), 40 CFR 63.6660)**
3. For each engine in FG-CIRICEMACT the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with operating limitations in SC III.3. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660)**

4. For each engine in FG-CIRICEMACT the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
5. For each engine in FG-CIRICEMACT the permittee shall keep in a satisfactory manner, records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation and how many hours were spent during non-emergency operation. If the engines were used for demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of demand response. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(f), 40 CFR 63.6660)**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semi-annual 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. Each affected source that has obtained a Title V Renewable Operating Permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal

Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

**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).

**FG-SIRICEMACT  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition RICE less than 500 bhp.

**Emission Units:** EU-MSCEMGEN1 through EU-MSCEMGEN11, EULNCNTEMGEN, EUPAINTEMGEN

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. Each engine in FG-SIRICEMACT shall be installed, maintained, and operated in a satisfactory manner. A list of recommended work practice standards as specified in 40 CFR 63.6602 and Table 2c, Item 6 or the permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. The following are the recommended work practices specified in 40 CFR Part 63 Subpart ZZZZ Table 2c:
  - a) Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2,
  - b) Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63 Subpart ZZZZ Table 2c, Item 6)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of 40 CFR Part 63 Subpart ZZZZ. **(40 CFR 63.6625(j))**
3. The permittee shall install, maintain and operate each engine in FG-SIRICEMACT and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6605, 40 CFR 63.6625(e))**



4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine in FG-SIRICEMACT to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**
5. The permittee shall not allow each engine in FG-SIRICEMACT to exceed 100 hours per calendar year for maintenance checks and readiness testing and emergency demand response. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2)(i))**
6. The permittee may operate each engine in FG-SIRICEMACT up to 50 hours per calendar year for non-emergency situations, but those hours are to be counted towards the 100 hours per calendar year for maintenance and testing and emergency demand response, as allowed in 40 CFR 63.6640(f)(2). **(40 CFR 63.6640(f)(3))**

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

1. The permittee shall install a non-resettable hour meter on each engine in FG-SIRICEMACT. **(40 CFR 63.6625(f))**

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

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

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Subpart ZZZZ Table 2c, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(j))**

**See Appendix 5**

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

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

1. For each engine in FG-SIRICEMACT the permittee shall keep in a satisfactory manner, records of the occurrence and duration of each malfunction of operation or the air pollution control monitoring equipment. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a)(2), 40 CFR 63.6660)**
2. For each engine in FG-SIRICEMACT the permittee shall keep in a satisfactory manner, records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a)(5), 40 CFR 63.6660)**

3. For each engine in FG-SIRICEMACT the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with operating limitations in SC III.3. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660)**
4. For each engine in FG-SIRICEMACT the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
5. For each engine in FG-SIRICEMACT the permittee shall keep in a satisfactory manner, records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation and how many hours were spent during non-emergency operation. If the engines were used for demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of demand response. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(f), 40 CFR 63.6660)**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semi-annual 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. Each affected source that has obtained a Title V Renewable Operating Permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semi-annual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**

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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

**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).

**FG – 500HPCIRICEMACT  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE greater than 500 bhp.

**Emission Units:** EU-PAINTEMGEN

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not allow each engine in FG-500HPCIRICEMACT to exceed 100 hours per calendar year for maintenance checks and readiness testing and emergency demand response. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. **(40 CFR 63.6640(f)(2)(i))**
2. The permittee may operate each engine in FG-500HPCIRICEMACT up to 50 hours per year for non-emergency situations, but those hours are to be counted towards the 100 hours per calendar year for maintenance and testing and emergency demand response, as allowed in 40 CFR 63.6640(f)(3). **(40 CFR 63.6640(f)(3))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

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))**

1. For each CI engine/s the permittee shall keep in a satisfactory manner, records of hours of operation. The permittee shall document how many hours were spent during emergency operation and how many hours were spent during non-emergency operation. If the engines were used for demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of demand response. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3))**

## **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. Each affected source that has obtained a Title V Renewable Operating Permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTIONS**

NA

## **IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subparts A-General Provisions and ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. **(R 336.1213), (40 CFR Part 63 Subparts A and ZZZZ)**

### **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).

**FG-Natural Gas  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas burning associated with the automotive assembly and painting operations, excluding plastic parts coating operations. The equipment includes process boilers, space heaters, process ovens, and miscellaneous support equipment installed under this permit.

**Emission Units:** EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER

**POLLUTION CONTROL EQUIPMENT**

None

**I. EMISSION LIMIT(S)**

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA        | NA    | NA                              | NA        | NA                         | NA                                 |

**II. MATERIAL LIMIT(S)**

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|---------------------------------|-----------|----------------------------|------------------------------------|
| NA       | NA    | NA                              | NA        | NA                         | NA                                 |

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

NA

**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))**

1. NA

**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))**

2. 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 |
|-----------------|-------------------------------------|------------------------------------|------------------------------------|
| NA              | NA                                  | NA                                 | NA                                 |

**IX. OTHER REQUIREMENT(S)**

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).

|  |
|--|
| <b>FG-COLDCLEANERS<br/>FLEXIBLE GROUP CONDITIONS</b> |
|--|

**DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

**Emission Unit:** EU-COLDCLEANERS

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

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

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

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

1. The cold cleaner must meet one of the following design requirements:
  - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(h))**
  - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
  - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**



- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
- 2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
  - a. A serial number, model number, or other unique identifier for each cold cleaner.
  - b. The date the unit was installed, manufactured or that it commenced operation.
  - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
  - d. The applicable Rule 201 exemption.
  - e. The Reid vapor pressure of each solvent used.
  - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

**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)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

**FG-RULE 287(c)  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

**Emission Unit:** EU-RULE287(c)

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

| Material    | Limit       | Time Period/ Operating Scenario                       | Equipment | Underlying Applicable Requirement |
|-------------|-------------|---|-----------|-----------------------------------|
| 1. Coatings | 200 gallons | Per month, as applied, minus water, per emission unit | NA        | <b>R 336.1287(c)(i)</b>           |

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

NA

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

1. Any exhaust system that serves only coating spray equipment shall be equipped with a properly installed and operating particulate control system. (R 336.1287(c)(ii))

**V. TESTING/SAMPLING**

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 the following information for each emission unit for each calendar month using the methods outlined in the DNRE, AQD Rule 287(c), Permit to Install Exemption Record form (EQP 3562) or an alternative format that is Acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Volume of coating used, as applied, minus water, in gallons. **(R 336.1287(c)(iii))**
  - b. Documentation of any filter replacements for exhaust systems serving coating spray equipment. **(R 336.1213(3))**

**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))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

|   |
|---|
| <b>FG-RULE290</b><br><b>FLEXIBLE GROUP CONDITIONS</b> |
|---|

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

**Emission Unit:** EU-RULE290 and EU-ALSHREDDER

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**
  - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
  - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
  - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
  - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(a)(iii))**
  - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**

- b. The visible emissions from the emission unit are not more than 5 percent opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
- c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

**II. MATERIAL LIMIT(S)**

NA

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

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

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

NA

**V. TESTING/SAMPLING**

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 the following information for each emission unit for each calendar month using the methods outlined in the DNRE, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
  - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
  - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
  - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
  - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

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))**

See Appendix 8

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

## **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 Natural Resources and Environment | 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                         |
| gr               | Grains   | psig            | Pounds per square inch gauge                            |
| HAP              | Hazardous Air Pollutant                                  | PeTE            | Permanent Total Enclosure                               |
| Hg               | Mercury  | PTI             | Permit to Install                                       |
| hr               | Hour   | RACT            | Reasonable Available Control Technology                 |
| HP               | Horsepower   | ROP             | Renewable Operating Permit                              |
| H <sub>2</sub> S | Hydrogen Sulfide   | SC              | Special Condition                                       |
| HVLP             | High Volume Low Pressure *                               | scf             | Standard cubic feet                                     |
| ID               | Identification (Number)                                  | sec             | Seconds   |
| IRSL             | Initial Risk Screening Level                             | SCR             | Selective Catalytic Reduction                           |
| ITSL             | Initial Threshold Screening Level                        | SO <sub>2</sub> | Sulfur Dioxide  |
| LAER             | Lowest Achievable Emission Rate                          | SRN             | State Registration Number                               |
| lb               | Pound  | TAC             | Toxic Air Contaminant                                   |
| m                | Meter  | Temp            | Temperature   |
| MACT             | Maximum Achievable Control Technology                    | THC             | Total Hydrocarbons                                      |
| MAERS            | Michigan Air Emissions Reporting System                  | tpy             | Tons per year   |
| MAP              | Malfunction Abatement Plan                               | µg              | Microgram   |
| MDNRE            | Michigan Department of Natural Resources and Environment | VE              | Visible Emissions                                       |
| mg               | Milligram  | VOC             | Volatile Organic Compounds                              |
| mm               | Millimeter   | yr              | Year  |

\*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**

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in the following emission units and flexible groups:

**A. FG-CONTROLS**

Permit No. MI-ROP-N0929-2017  
Ford Flat Rock Assembly Plant  
Malfunction Abatement Plan  
June 19, 2007

This document was created to define the malfunction abatement plan as required by sub rule (2) of Rule 911 of the Air Pollution Control Rules – Part 9. Emission Limitations and Prohibitions. This abatement plan is used to detect, prevent, and correct malfunctions or equipment failures resulting in emissions exceeding applicable emission limitations. The plan will be revised within 45 days of occurrence if a malfunction occurs that is not addressed within the plan.

**Table of Contents**

**Page Number**

|  |   |
|--|---|
| Description of Control Equipment.....  | 2 |
| Preventative Maintenance Program.....  | 2 |
| Regenerative Catalytic Oxidizer and Regenerative Thermal Oxidizer Monitored Variables... | 3 |
| Corrective Procedures and Operating Scenarios.....                                       | 3 |
| Table 1 Highlights of Preventative Maintenance Activities.....                           | 4 |
| Table 2 Typical Emission Control Equipment Replacement Parts Inventory .....             | 4 |

### **Description of Control Equipment**

Emissions from the Ford Flat Rock Assembly Plant (FRAP) Body Paint Shop are controlled, in part, by the three regenerative catalytic oxidizers (RCO) and a regenerative thermal oxidizer (RTO), which destroy paint booth and oven volatile organic compound (VOC) emissions resulting from the painting of automobile bodies. Spray booths served by the RCOs are located at the FRAP guidecoat, topcoat, and clearcoating operations. The RTO serves the body paint shop oven emission sources.

The RCOs control the VOC emissions resulting from the painting process by oxidizing the VOC in the presence of a catalytic media at an elevated temperature. Similarly, the RTO controls the body paint oven emissions by oxidizing them thermally at high temperature (1400 degrees Fahrenheit). Both the RCO, and RTO are designed to maximize their thermal efficiency by recovering as much heat as possible by reversing the VOC laden air flow on a timed basis through a ceramic medium that recovers heat generated as a result of the VOC destruction process. In the case of the RCOs, catalytic media is placed on a portion of the ceramic medium to reduce the processing temperature used to destroy VOCs, thereby reducing energy costs and green house gas emissions. This catalytic medium is kept at a minimum operating temperature of 800 degrees Fahrenheit when the RCOs are in use.

The number of RCO's in operation at any time is dictated by the volume of booth gas that is to be controlled. Each RCO is capable of processing up to 150,000 cubic feet of booth gas per minute. The RTO is dedicated to processing oven emission gases and is capable of processing up to 25,000 cubic feet of oven gas per minute.

### **Preventative Maintenance Program**

#### **Identification of Supervisory Personnel**

The Paint Area Manager and the Paint Manufacturing Engineering Manager are responsible for overseeing the inspection, maintenance and repair of air-cleaning devices. Repair work is completed by either plant skilled trades personnel or outside contractors experienced in the maintenance and operation of these devices.

#### **Descriptions of Items and/or Conditions that Shall Be Inspected/Frequency of Inspection or Repairs**

Inspections and routine preventive maintenance, as recommended by the equipment manufacturer and/or identified based on past equipment failures, are performed on a routine basis for the RCO/RTO emission control equipment. Specific inspection and maintenance tasks are part of the facility's Total Equipment Maintenance System (TEMS), which identifies inspection and maintenance task information including part/component worked on, work performed, personnel performing the work, and date of the repair for all major process and control equipment. Documented records of all inspections and maintenance activities performed are maintained within the TEMS system which will be made available to the Michigan Department of Environmental Quality Air Quality Division (MDEQ AQD) for inspection at their request. Table 1 contains highlights of the FRAP preventative maintenance program for the RCO/RTO equipment, including frequency of inspections/repairs.

#### **Major Replacement Parts Maintained in Inventory**

A critical spare parts inventory has been identified and is maintained for the RCO/RTO control equipment at FRAP. Critical spare parts are those that are deemed unique in their design and/or are difficult to obtain, and may contribute to the malfunction of existing control equipment based on supplier information, plant operating experience, and/or good engineering judgment. The inventory list has been developed identifying the critical spare parts kept by the plant and where they are located. The critical spare parts in the inventory are subject to change based on best engineering judgment and technological/equipment improvements.

As spare parts are utilized, necessary replacements are acquired to maintain adequate inventory levels. Inventory checks are routinely performed (e.g. quarterly) to ensure part availability.

Table 2 lists the typical spare parts that are inventoried at FRAP.

### **Regenerative Catalytic/Thermal Oxidizer Monitored Variables**

Important operational parameters including, fan performance, burner condition, vibration, valve movement, hydraulic pressure, chamber temperature, etc. are monitored through the programmable logic controller (PLC). The PLC is programmed to send an alarm (fault) to the FRAP central control room (CCR) in the event that the RCO/RTO operate outside of preprogrammed operating windows.

When an abatement equipment fault condition/status is received by the FRAP CCR, the Paint Department Maintenance staff is contacted to investigate and remedy the fault. The Maintenance staff investigates the fault, makes an immediate repair if possible, notifies CCR of the completion of the repair, and in some cases restarts (if needed). All repairs resulting in downtime, including bypass to atmosphere, on the RCO equipment are noted in the Paint Maintenance Supervisors log book, which can be made available for inspection by the MDEQ AQD upon request.

Should the repair require more time: Maintenance staff will notify CCR of the approximate repair time, complete the repair, notify CCR of its completion for recording, and restart the equipment. Any repair that cannot be made within one (1) hour must be communicated to the facility Plant Manager.

If an abnormal condition or malfunction of the abatement equipment results in the exceedance of an applicable standard or emission limitation lasting longer than two hours, the FRAP Environmental Manager will notify MDEQ AQD. The notification is made as soon as reasonably possible, but not later than two business days after becoming aware of the event. A written report detailing the event is submitted within ten days after the abnormal condition or malfunction has been corrected or thirty days after the abnormal condition or malfunction was detected, whichever is first. The written report identifies the emission source, the time and duration of the event, corrective and preventive actions taken, actions taken to minimize emissions, and, if possible, an estimate of the emissions during the event.

An 8-D Report is completed with details on the equipment faults that occur repeatedly or result in repairs that cannot be addressed immediately. Noted on the form is the concern, containment action, root cause analysis, actions taken (interim and permanent), verification of the repair, and preventative measures. This process of evaluating problem is used throughout the company. The completed forms reside in the Paint Maintenance Annex.

### **Corrective Procedures and Operating Scenarios**

If any destruction efficiency test indicates that an individual RCO fails to maintain a minimum VOC destruction efficiency of 95 percent or has an outlet non methane VOC concentration of greater than 5 ppm (measured as propane), then the facility must take corrective action.

In addition to robust PM and expeditious repair activities, the plant management, in consultation with environmental staff as appropriate, will evaluate the appropriateness and/or feasibility of operational constraints to minimize VOC emissions during RCO/RTO malfunction or abnormal conditions. VOC emissions will be estimated during the malfunction based on similar production data from a previous month. If a breakdown is going to result in exceedance of a short-term mass VOC emission limit on the RCOs or RTO, plant management will consider various options to minimize emissions. Possible operating actions may include, but are not limited to, the following:

- Adjusting two of three RCOs to service operational process sources
- Adjusting production schedule to minimize emissions (i.e. lunches or breaks)
- Reducing operating hours (i.e. don't run scheduled overtime)
- Temporarily slowing down or stopping production through part or all of the paint production process

Primary consideration will be given to the potential risk of negatively impacting human health and the environment. In situations where the risk of negatively impacting human health and environment is high, plant management will consider more drastic operating constraints, including an orderly shutdown to minimize emissions.

**Table 1**

**FRAP RCO/RTO Preventative Maintenance Activities**

| <b>Frequency</b> | <b>Maintenance Activity</b>  |
|------------------|--|
| Weekly           | Check for Lubrication levels/Noise/Vibration/Drive Frequency/Hydraulic oil levels/Valve timing   |
| Monthly          | Linkage and valve lubrication/Jumper wire check/ Lubricate valve linkage and shafts/ Check valve hold down bolts   |
| Quarterly        | Inspect valve panels for leaks, hydraulic units for oil level/filter, filter houses conditions, combustion blower operation, VFD filters change requirements   |
| Semi Annual      | Inspection of proximity switches on all vacuum breakers, E-stop, electrical panels, magnahelic switches condition, dampers adjustments, catalyst visual inspection for gaps and settling, operation of transducers, fan motor lubrication needs, and grease fan couplers |
| Annual           | Hot spot visual inspection, insulation condition, lubricate hydraulic pump motors, and change hydraulic oil/filter   |

**Table 2**

**Typical Emission Control Equipment Replacement Part Inventory**

| <b>Part Name</b>                     | <b>Storage Location</b>                   |
|--------------------------------------|---|
| Motor for Main Blower                | Paint Maintenance Oven Area               |
| Variable Frequency Drives            | Paint Maintenance MSC Crib                |
| Thermocouples                        | Paint Maintenance Crib                    |
| Filter House Filter Elements         | Paint Maintenance Oven Area               |
| Flame Detection Components           | General Stores                            |
| PLC Processors and Cards             | Paint Maintenance Crib                    |
| Gas Train Regulators/Switches/Valves | Paint Maintenance Crib and General Stores |
| Hydraulic Cylinders and Valves       | Paint Maintenance Crib                    |

## **FG-CONTROLS**

# **Ford Flat Rock Assembly Plant – Outlet Concentration Monitoring Plan Proposal**

---

---

### Outlet Concentration Monitoring (OCM) Plan – APPENDIX 3 (Revised January 31, 2013)

#### **General**

The Outlet Concentration Monitoring (OCM) plan is a trending tool to monitor the performance of the Regenerative Catalytic Oxidizers (RCOs) in FGCOATING. Other compliance testing used to demonstrate compliance with VOC emission limitations contained in FG-FACILITY will be used to assess RCO performance, but that testing is in addition to the monitoring described below.

#### **Monitoring Frequency/Equipment/Duration**

1. The concentration of total VOC and methane from each RCO will be monitored once (1) per year with a JUM 109a FID or equivalent. The analyzer will be calibrated in accordance with Method 25A procedures. The drift during the run can be no greater than  $\pm 3\%$  of span, or 3 ppmv whichever is the least restrictive, for the results to be valid.
2. The permittee must notify the AQD of schedule changes required to accommodate production schedule changes. Notifications can be made by telephone or e-mail.
3. Sampling of each RCO exhaust will be conducted during periods of normal operation for a period at least as long as the RCO cycle time.
4. Production information will be documented during each test event. Changes in production data will be considered when evaluating trends in the outlet concentration.
5. Additional monitoring may be required at the request of AQD if community odor complaints are received.

#### **Monitoring Protocol**

1. A written test plan must be submitted at least 30 days prior to the initial monitoring of RCO performance. If the permittee does not propose any changes to the initial approved plan the permittee will notify the AQD in writing 30 days prior to subsequent RCO performance monitoring. After three (3) consecutive demonstrations of acceptable RCO performance, the permittee may request a reduced frequency or termination of the monitoring. Data from compliance tests and monitoring checks may be used for the demonstration. Any change in the monitoring schedule requires approval of the AQD District Supervisor.

#### **Reporting**

1. A Complete report of test results must be submitted to the AQD Detroit District Supervisor within 60 days following the testing.
2. The test report will contain the average total VOC and non-methane VOC concentration in the exhaust of each RCO and the results of all QA tests. Only the average non-methane VOC concentration of the individual RCO will be used for trending purposes. The data in this report will not be used for demonstrating compliance with the permit limitations.
3. If the monitoring indicates a significant decrease in RCO performance (a significant increase in the average non-methane VOC concentration of any RCO), the permittee must notify the AQD in the report submittal and identify corrective actions.

## **B. FG-Controls**

---

---

### **Elements of an O&M plan – CAM**

The requirements of Compliance Assurance Monitoring (CAM), as promulgated under 40 CFR 64.2, apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- (1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1) of this section;
- (2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in Sec. 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

In accordance with 40 CFR 64.3, to provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, monitoring under this part, the CAM Plan shall meet the following general criteria:

- (1) The owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance for the control device and any associated capture system. Indicators of performance may include, but are not limited to, direct or predicted emissions, process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities conducted by the owner or operator.
- (2) The owner or operator shall establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. In addition, unless specifically stated otherwise by an applicable requirement, the owner or operator shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere, if such bypass can occur based on the design of the pollutant-specific emissions unit.
- (3) The design of indicator ranges or designated conditions may be based on a single maximum or minimum value if appropriate, may be expressed as a function of process variables, may be expressed as maintaining the applicable parameter in a particular operational status or designated condition, or may be established as interdependent between more than one indicator.

Under 40 CFR 64.4(4)(b), for a CAM Plan, the owner or operator shall submit a justification for the proposed elements of the monitoring plan and if the proposed performance specifications include differences from manufacturer recommendations, the plan shall explain the reasons for the differences. If the CAM Plan relies on presumptively acceptable monitoring, no further justification for the appropriateness of that monitoring should be necessary.

At the Flat Rock Assembly Plant, the following sources are subject to CAM under the above requirements:

- EU-Ecoat (utilizing regenerative thermal oxidizer for compliance)
- EU-Guidecoat (utilizing catalytic oxidizers and a regenerative thermal oxidizer for compliance)
- EU-Topcoat (utilizing catalytic oxidizers and a regenerative thermal oxidizer for compliance)

In conjunction with this Malfunction Abatement Plan, the following control device parameters and associated inspection and maintenance activities serve as acceptable monitoring based on known performance of carbon concentrators and thermal oxidizers for the emission units subject to CAM at the Flat Rock Assembly Plant:

#### Regenerative Thermal Oxidizers

Combustion Chamber Temperature and Calibration: Monitor combustion chamber temperature to ensure it is not below the most recent performance test to ensure air stream is maintained at a temperature necessary to destroy the volatile organic compound within the regenerative thermal oxidizer.

#### Catalytic Oxidizers

Combustion Chamber Temperature and Calibration: Monitor combustion chamber temperature to ensure it is not below the most recent performance test to ensure air stream is maintained at a temperature necessary to destroy the volatile organic compound within the regenerative thermal oxidizer.

General – Keep records of maintenance inspections which include the dates, results of the inspections and the dates and reasons for repairs if made. The following items shall be inspected for each respective control device used to demonstrate compliance with applicable VOC emissions limits.

#### RTO's

- Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
- Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months.\*
- Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months.\*

\*The requirement to address this issue is satisfied if a performance test (i.e., stack test) has been performed on the control device within the prior 18 month period.

#### RCO's

- Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
- Perform an internal inspection of the catalyst bed to check for channeling, abrasion and settling a minimum of once every 18 months.\*
- Perform sampling and analysis of catalyst activity (conversion efficiency) a minimum of once every 18 months.\*
- Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months.\*

\*The requirement to address this issue is satisfied if a performance test (i.e., stack test) has been performed on the control device within the prior 18 month period.

## C. EU-BULBCRUSHER

### Recommended Best Management Practices for Drum-top Crushers (DTC)

1. The DTC should be commercially manufactured by a reliable manufacturer. The unit should have a vacuum pump to create negative internal pressure and well designed and tightly fitted seals at all connection points. The DTC must include a bag filter followed in series by a HEPA filter and an activated carbon filter to control particulate emissions.
2. The DTC should be used and stored in a room completely segregated from other parts of the building, with a dedicated ventilation/exhaust system that discharges to the ambient air. The DTC should not be used or stored in areas where the temperature is elevated (e.g., a boiler room). Use workroom ventilation to create a slight



negative pressure throughout the entire work area, so any fugitive emissions are captured by the facility's air filtration system. Workroom ventilation/exhaust or exhaust from the DTC should be located away from air intakes.

3. If the DTC must be moved, all ports should be covered or plugged and movement should be done in a manner to avoid disturbing the contents of the drum. Ports should also be plugged or sealed when the DTC is not in use.
4. All operators should be trained in the proper assembly, maintenance and operation of the DTC. This includes training in the proper use of Personal Protective Equipment (PPE); inspection of the DTC to determine proper assembly, damage or wear; feeding spent lamps into the DTC; changing filters and carbon; drum change-outs; and proper clean up of broken lamps.
5. All operators should wear appropriate Personal Protective Equipment (PPE) when operating the DTC. PPE includes puncture-resistant gloves, safety glasses or a face shield, dedicated uniforms or disposable coveralls and booties, and a fit-tested respirator with cartridges designed specifically for use with mercury. Clothing and PPE worn while operating the DTC should not be worn outside the areas designated for DTC use.
6. Before each use, the operator should inspect the DTC for damage or worn components; improper assembly; missing, damaged or improperly fitted seals; seal integrity between the crusher unit and the drum; proper vacuum (negative pressure); and proper air flow.
7. The DTC should be operated according to manufacturer's recommendations. This includes not crushing more than the manufacturer-recommended number of lamps per drum and not using the DTC continually for longer than the manufacturer recommends. The DTC should not be opened to put debris into the drum.
8. The manufacturer's recommended maintenance schedule should be followed for carbon filter and drum change outs. A maintenance log should be kept with the DTC recording all carbon filter changes, drum change outs and other maintenance.
9. Drum change-outs should be performed according to the manufacturer's specifications and procedures, and operators conducting change-outs should wear appropriate PPE. Before changing a drum, allow the contents to settle for at least 15 minutes before removing the DTC from the drum. The drum should be changed by two trained operators, and the full drum should be covered as quickly as possible and tightly sealed. Crushed lamps should not be removed from the drum.
10. The DTC should not be used if there is phosphor (white powder) on or around the DTC; there is any damage to the DTC, especially the vacuum system, seals or filters; or the DTC has been incorrectly assembled or modified in any way.
11. Drums containing crushed lamps should be managed according to applicable federal and state regulations and sent to a commercial recycler. Crushed lamp drums should be structurally sound and well sealed. Crushed lamps should not be transferred to a different container. Drums containing crushed lamps should not be stored in an area where the temperature is elevated (e.g., boiler room) or in the direct sun. A cleanup plan should be developed in the event a drum containing crushed lamps is spilled. The plan should incorporate procedures recommended by the equipment manufacturer, as well as standard industry practices.

### **RECOMMENDED BEST MANAGEMENT PRACTICES FOR LAMP HANDLING & STORAGE**

1. **Storage of Lamps - Designate an area within your facility to store lamps.**
  - Storage locations should be away from high-traffic areas.
  - Larger facilities may need more than one location for easier access.
  - Storage rooms should be clean, dry and free of broken lamp debris.

- Areas should ideally have an air handling system that is independent from the rest of the building that does not re-circulate air or reintroduce air through vents and intakes.
- 2. Handling Spent Lamps – Employees should know whom to call if a lamp is burned out.**
- Trained employees should remove lamps carefully to prevent breakage.
  - Spent lamps should immediately be stored in a sturdy container.
  - Spent lamps should not be left in a position or in an area where they can be easily broken.
- 3. Storage of Spent Lamps - Spent lamps can be put back into original boxes, or specially made lamp containers can be purchased for spent lamp storage.**
- Containers should be closed, structurally sound, and constructed to provide protection from breakage during storage and transportation.
  - Containers should lack evidence of leaks, spills or damage that could cause leaks or a release of mercury.
  - Containers should be stable and stored in such a way that they will not easily tip over.
  - Do not pack too many lamps into a container - the pressure could lead to breakage.
  - Do not stack containers too high – addition weight of the pile could crush lamps on the bottom.
  - Do not tape lamps together or use rubber bands.
  - Clearly identify containers of spent lamps (e.g., Waste Lamps or Used Lamps)
  - Close and securely seal containers with tape.
- 4. Handling Broken Lamps – Broken lamps release mercury and may present health hazards. Follow MIOSHA, EPA, and state regulations when managing broken lamps.**
- Create procedures for reporting and managing broken lamps. Post these procedures in areas where fluorescent lamps are handled or stored.
  - Follow the clean-up procedure at [www.epa.gov/mercury/spills/index.htm#fluorescent](http://www.epa.gov/mercury/spills/index.htm#fluorescent). Clean-up procedures (specific instructions and clean-up contact) should be posted in areas where fluorescent lamps are handled or stored.
  - Keep broken lamps in a sealed container, and keep the container in a cool place, away from high-traffic areas, preferably outdoors.
  - Keep cleaning implements used for broken lamps in the room or area and do not use them elsewhere in the facility.
  - Do not open containers of broken lamps to add or remove broken lamps.

#### **Appendix 4. Recordkeeping**

Specific recordkeeping requirement formats and procedures 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 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 or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N0929-2011a. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N0929-2011 is being reissued as Source-Wide PTI No. MI-PTI-N0929-2018

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change  | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---------------------------------|---|---|
| NA                       | 2012000125                      | On September 1, 2012, Ford Motor Company obtained operational control of the facility and changed the facilities name to Ford Motor Company – Flat Rock Assembly. | All   |

**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 the following emission units and flexible groups.

**A. EU-PLASTIC**

[To show compliance with tons/year VOC limit]

*VOC Emission Rate Annual Emission Calculation (tons VOC/year): (12 month rolling time period)*

$$\text{Tons VOC/year} = \frac{\sum_{n=12} \text{Usage (gallons(minus water)/month)} * \text{VOC(lbs/gal minus water)}}{2000 \text{ lbs/ ton}}$$

[To show compliance with lbs/hour VOC limit]

*VOC Emission Rate Hourly Emission Calculation (lbs/hr):*

$$\text{Pounds VOC/hour} = \frac{\text{Usage (gallons (minus water)/month)} * \text{VOC(lbs/gal minus water)}}{\text{Monthly hours of operation}}$$

[To show compliance with pounds/gallon minus water as applied VOC limits as described in R336.1621 and R336.1632. Sealers/Adhesives in a particular Coating category shall be averaged together to show compliance with a category limit.]

*VOC Emission Rate Pounds of VOC per Gallon of Coating Minus Water(lbs. VOC/gal (minus water)):*

Follow the calculation method described in R336.2040(a). Note: Averaging period is a 24 hour calendar day. Monthly data shall be divided by the number of days of production in the given month to get a 24 hour averaging period.

- 1) Determine the VOC content of each coating, minus water, as applied, “P” during the averaging period by using the method described in R336.2040(5).

2) Determine the weight of VOC used during the averaging period “M” by using the method described in R336.2040(6).

$$M = \sum_{i=1}^z L_{ci} P$$

3) Determine the total volume of coatings used on the coating line during the averaging period “G<sub>t</sub>” using the following equation:

$$G_t = \sum_{i=1}^z L_{ci}$$

4) Determine the volume-weighted average weight of VOC per gallon, minus water, as applied, by the following equation:

$$P_a = M/G_t$$

5) If “P<sub>a</sub>” is less than or equal to the specified emission limit, the coating line meets the emission limit.

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-PLASCTI PURGE & CLEAN.

[To show compliance with tons/year VOC limit]

***VOC Emission Rate Annual Emission Calculation (tons VOC/year): (12 month rolling time period)***

$$\text{Tons VOC/year} = \frac{\sum_{n=12} \text{Usage (gallons(minus water)/month)} * \text{VOC(lbs/gal minus water)}}{2000 \text{ lbs/ ton}}$$



## **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.

### **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.