

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

EFFECTIVE DATE: August 30, 2023

ISSUED TO

Denso Manufacturing Michigan, Inc.

State Registration Number (SRN): N1192

LOCATED AT

1 Denso Road, Battle Creek, Calhoun County, Michigan 49037

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N1192-2023

Expiration Date: August 30, 2028

Administratively Complete ROP Renewal Application Due Between
March 2, 2027 and March 2, 2028

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 Rule 210(1) of the administrative rules promulgated under Act 451, 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-N1192-2023

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, 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 Environment, Great Lakes, and Energy

Monica Brothers, Kalamazoo District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	4
A. GENERAL CONDITIONS.....	5
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. SOURCE-WIDE CONDITIONS	12
C. EMISSION UNIT SPECIAL CONDITIONS	16
EMISSION UNIT SUMMARY TABLE.....	16
EU-HTR1	19
EU-HTR2	23
EU-CONDMF3.....	27
EU-CONDMF41	31
EU-CONDGIC2.....	36
EU-EVAP1	40
EU-EVAP2	44
EU-EVAP4	48
EU-EVAP5.....	52
EU-EVAPCS2	55
EU-EVAPSP4	59
EU-GASTANK	62
EU-RDR1.....	64
EU-RDR2.....	68
EU-RDR3.....	72
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	76
FLEXIBLE GROUP SUMMARY TABLE.....	76
FG-COLDCLEANERS	77
FG-RULE290	80
FG-MACT-ZZZZ ≤500HP	83
FG-NSPS-JJJJ	87
FG-SURFACECOAT.....	91
E. NON-APPLICABLE REQUIREMENTS	94

APPENDICES 95

Appendix 1. Acronyms and Abbreviations 95

Appendix 2. Schedule of Compliance 96

Appendix 3. Monitoring Requirements 96

Appendix 4. Recordkeeping 96

Appendix 5. Testing Procedures 96

Appendix 6. Permits to Install 96

Appendix 7. Emission Calculations 97

Appendix 8. Reporting 97

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 Environment, Great Lakes, and Energy (EGLE) 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).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. 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:"² **(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.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(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).² **(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 state 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))**
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

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

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

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

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

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(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 reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 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.² **(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.² **(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, EGLE.² **(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, EGLE, 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.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each individual HAP	Less than 9.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI.2 SC VI.3	R 336.1205(3)
2. Aggregate HAPs	Less than 22.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI.2 SC VI.3	R 336.1205(3)
3. VOC	Less than 225 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI.2 SC VI.4	R 336.1205(3)
4. VOC	30.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	All metallic surface coating lines operating per R 336.1621(10) at Stationary Source	SC VI.2 SC VI.5	R 336.1702(d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations.² (**R 336.1205(3)**, **R 336.1224**, **R 336.1702(a)**)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311.² **(R 336.1205(3))**

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 complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² **(R 336.1205(3), R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, reducer, and purge/clean-up solvent, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(3), R 336.1702(d))**
3. The permittee shall keep the following information on a monthly basis for SOURCE-WIDE:
 - a. Gallons or pounds of each HAP containing material used.
 - b. Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
 - d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.
 - e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(3))**

4. The permittee shall keep the following information on a monthly basis for SOURCE-WIDE:
 - a. Gallons or pounds of each VOC containing material used.
 - b. Where applicable, gallons or pounds of each VOC containing material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
 - d. VOC emission calculations determining the monthly emission rate in tons per calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.
 - e. VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(3))**

5. The permittee shall keep the following information on a monthly basis for all metallic surface coating lines operating per R 336.1621(10):
 - a. Gallons or pounds of each VOC containing material used.

- b. Where applicable, gallons or pounds of each VOC containing material reclaimed.
- c. VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
- d. VOC emission calculations determining the monthly emission rate in tons per calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.
- e. VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month using mass balance or an alternate method acceptable to the AQD District Supervisor.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1702(d))**

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)

- 1. The permittee shall maintain video surveillance and regular guard patrols to prevent unauthorized individuals from loitering in the employee parking lots extending to approximately 150 meters east of the DMMI plant and on DMMI plant property.¹ **(R 336.1225)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-HTR1	A heater core manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (H451); and brazing.	03-17-1997/ 09-10-2014	NA
EU-HTR2	A heater core manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (H751); and brazing.	04-01-2004/ 09-10-2014	NA
EU-CONDMF3	A condenser manufacturing area consisting of metal stamping presses, metal cutting, welding, and degreasing of small parts; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (C452A); and brazing.	02-01-2000/ 11-13-2012	NA
EU-CONDMF41	A condenser manufacturing area consisting of metal stamping presses, metal cutting, welding (C1038), plasma fluxing (C1100, C1200, and C1300), and aqueous degreasing of small parts; metal forming of tubes/fins and mechanical assembly of cores with components; core oven degreasing (C550A); and brazing.	04-08-2003/ 11-13-2012/ 04-04-2013/ 08-15-2013/ 01-13-2017 10-18-2017 09-12-2018	NA
EU-CONDGIC2	A condenser manufacturing area consisting of metal stamping presses; metal cutting, welding, plasma fluxing (C1100, C1200, and C1300) and aqueous degreasing of small parts; metal forming of tubes/fins and mechanical assembly of cores with components; core oven degreasing (C1150A); and brazing.	07-01-2015/ 01-13-2017 10-18-2017 09-12-2018	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-EVAP1	An evaporator manufacturing area consisting of metal stamping, degreasing (C801), fluxing, and cutting of small parts; metal forming of fins and mechanical assembly of cores with components; and brazing. Emissions from each oven degreaser are controlled by a separate thermal oxidizer.	01-01-2004	NA
EU-EVAP2	An evaporator manufacturing area consisting of metal stamping, degreasing (C852), fluxing, and cutting of small parts; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (C884); and brazing. Emissions from each oven degreaser are controlled by a separate thermal oxidizer.	01-01-2005/ 11-01-2006 08-07-2019	NA
EU-EVAP4	An evaporator manufacturing area consisting of metal stamping, degreasing (C902), fluxing and cutting of small parts; plasma fluxing and metal forming of tubes/fins, and mechanical assembly of cores with components; core oven degreasing (C924); and brazing.	12-01-2007 10-24-2018	NA
EU-EVAP5	An evaporator manufacturing area consisting of metal forming of fins and mechanical assembly of cores with components; core oven degreasing (E124); and brazing.	12-01-2013	NA
EU-EVAPCS2	An evaporator manufacturing area consisting of case assembly, metal forming of fins and mechanical assembly of cores with components, core oven degreasing (E320A), and brazing (E320),	08-02-2018	NA
EU-EVAPSP4	Small parts manufacturing area consisting of a metal stamping press, small parts degreaser (E303), and small parts fluxing (E304).	11-09-2017	NA
EUGASTANK	An existing stationary gasoline dispensing facility located at an area source of hazardous air pollutant that has a maximum monthly gasoline throughput of <10,000 gallons.	01-01-2020	NA
EU-C832	Surface treatment machine employing dip treatment/coating of cores in a series of baths that includes acid pretreatment, conversion coating, hydrophilic coating, and water rinses followed by a drying oven and cooling fans.	12-04-2002/ 12-01-2008	FG-SURFACECOAT
EU-C833	Surface treatment machine employing dip treatment/coating of cores in a series of baths that includes acid pretreatment, conversion coating, hydrophilic coating, and water rinses followed by a drying oven and cooling fans.	02-10-2004/ 12-01-2008	FG-SURFACECOAT
EU-C834	Surface treatment machine employing dip treatment/coating of cores in a series of baths that includes acid pretreatment, conversion coating, hydrophilic coating, and water rinses followed by a drying oven and cooling fans.	09-17-2004/ 12-01-2008	FG-SURFACECOAT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-C933	Surface treatment machine employing dip treatment/coating of cores in a series of baths that includes acid pretreatment, conversion coating, hydrophilic coating, and water rinses followed by a drying oven and cooling fans.	10-01-2006/ 12-01-2008	FG-SURFACECOAT
EU-RDR1	A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R540); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.	06-01-2015/ 11-29-2016	NA
EU-RDR2	A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R140); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.	09-01-2006/ 11-29-2016	NA
EU-RDR3	A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R640); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.	11-29-2016	NA
EU-COLD CLEANERS	Any existing cold cleaner (placed into operation prior to 7-1-79) or new cold cleaner (placed into operation after 7-1-79) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285(r)(iv).	Various	FG-COLDCLEANERS
EU-RULE 290	Any existing or future emission unit that emits air contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290.	Various	FG-RULE290
EU-FAG # 1	Diesel fired emergency generator located in the powerhouse rated at 134 bHP.	01-01-1985	FG-MACT-ZZZZ ≤500HP
EU-FAG # 2	Diesel fired emergency generator located in the powerhouse rated at 61 bHP.	01-01-1986	FG-MACT-ZZZZ ≤500HP
EU-FAG # 3	Diesel fired emergency generator located in the powerhouse rated at 66 bHP.	01-01-1987	FG-MACT-ZZZZ ≤500HP
EU-FAG # 5	Natural gas fired emergency generator located on office roof rated at 202 bHP.	01-01-1999	FG-MACT-ZZZZ ≤500HP
EU-FAG # 6	Natural gas fired emergency generator located outside of J-20 rated at 176 bHP.	01-01-2001	FG-MACT-ZZZZ ≤500HP
EU-FIRE PUMP # 1	Diesel fired fire pump located in Pumphouse #1 rated at 231 bHP.	01-01-1985	FG-MACT-ZZZZ ≤500HP
EU-FIRE PUMP # 2	Diesel fired fire pump located in Pumphouse #2 rated at 208 bHP.	01-01-1993	FG-MACT-ZZZZ ≤500HP
EU-FAG # 7	Natural gas fired emergency generator located on roof rated at 44 bHP.	01-01-2011	FG-NSPS-JJJJ

**EU-HTR1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A heater core manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (H451); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

H451 Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	12.0 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-HTR1	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	39.3 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-HTR1	SC VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-HTR1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (H451) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.33 pph, a minimum temperature of 1,292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall not operate the oven degreaser (H451) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² (R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (H451) or a representative heater core area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1205, R 336.1225, R 336.1702(a))
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² (R 336.1225, R 336.1702)
3. The permittee shall keep the following information on a monthly basis for EU-HTR1:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.

- b. Where applicable, gallons or pounds of each material reclaimed.
- c. VOC content, in pounds per gallon or pounds per pound, of each material used.
- d. Total usage of machining oil for EU-HTR1 in tons per 12-month rolling time period as determined at the end of each calendar month.
- e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 25.6 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

- 4. For EU-HTR1, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-HTR1 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-H451a (Thermal Oxidizer #96)	22 ²	46 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
2. SV-H451b (Oven degreaser electrostatic filter #97)	22 ²	48 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
3. SV-H450a (Brazing furnace pressure relief tank #98)	12 ²	41 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
4. SV-H450b (Brazing furnace entrance chamber #101)	10 ²	41 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
5. SV-H450c (Brazing furnace exit chamber #102)	10 ²	41 ²	R 336.1225, 40 CFR 52.21 (c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
6. SV-H450d (Brazing furnace nitrogen purge vents – normally closed #103)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)
7. SV-H450e (Brazing furnace vacuum pump #104)	6 ²	48 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
8. SV-H450f (Brazing furnace vacuum pump #105)	6 ²	48 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
9. SV-H494 (pipe washer #228)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)
10. SV-H475, R532, and H775 (dry off oven and two core torch repair booths #261)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-HTR2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A heater core manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (H751); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

H751 Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	10.3 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-HTR2	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	33.7 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-HTR2	SC VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-HTR2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (H751) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.29 pph, a minimum temperature of 1,400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall not operate the oven degreaser (H751) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² (R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (H751) or a representative heater core area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1205, R 336.1225, R 336.1702(a))
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² (R 336.1225, R 336.1702)

3. The permittee shall keep the following information on a monthly basis for EU-HTR2:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-HTR2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 25.6 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-HTR2, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-HTR2 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-H751 (Thermal Oxidizer #201)	12 ²	50 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
2. SV-H750a (Brazing furnace entrance chamber #202)	12 ²	50 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
3. SV-H750b (Brazing furnace purge vent – normally closed #203)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4. SV-H750c (Brazing furnace purge vent – normally closed #204)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)
5. SV-H750d (Brazing furnace exit chamber #205)	4 ²	48 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
6. SV-H750e (Brazing furnace cooling #206)	48 ²	50 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
7. SV-H750f (Brazing furnace cooling #207)	48 ²	50 ²	R 336.1225, 40 CFR 52.21 (c) and (d)
8. SV-H494 (pipe washer #228)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)
9. SV-H475, R532, and H775 (dry off oven and two core torch repair booths #261)	NA ²	NA ²	R 336.1225, 40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-CONDMF3
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A condenser manufacturing area consisting of metal stamping presses, metal cutting, welding and degreasing of small parts; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (C452A); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

C452A Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	28.4 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-CONDMF3	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	45.6 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-CONDMF3	SC VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-CONDMF3 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (C452A) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 94 percent (by weight) or a maximum VOC emission rate of 0.37 pph, a minimum temperature of 1292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the oven degreaser (C452A) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (C452A) or a representative condenser area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor.

All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702, R 336.1901)**

3. The permittee shall keep the following information on a monthly basis for EU-CONDMF3:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-CONDMF3 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 40 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-CONDMF3, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-CONDMF3 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C452Aa (Thermal Oxidizer)	24 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
2. SV-C452Ab (Oven degreaser entrance/exit)	20 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SV-C452a (Brazing furnace cooling)	36 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
4. SV-C452b (Brazing furnace entrance N2 purge – normally closed)	NA ²	NA ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
5. SV-C452c (Brazing furnace exit N2 purge – normally closed)	NA ²	NA ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
6. SV-C452d (Brazing furnace entrance vacuum pump)	8 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
7. SV-C452e (Brazing furnace exit vacuum pump)	8 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
8. SV-C452f (Brazing furnace pressure relief tank)	24 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
9. SV-C452g (Brazing furnace N2 release valves – normally closed)	NA ²	NA ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
10. SV-C452h (Brazing furnace cooling)	36 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
11. SV-C452i (Brazing furnace cooling)	36 ²	50 ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)
12. SV-C452j (Brazing furnace N2 release valves – normally closed)	NA ²	NA ²	R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-CONDMF41
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A condenser manufacturing area consisting of metal stamping presses, metal cutting, welding (C1038), plasma fluxing (C1100, C1200, and C1300) and aqueous degreasing of small parts; metal forming of tubes/fins and mechanical assembly of cores with components; core oven degreasing (C550A); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

C550A Thermal Oxidizer, C1100 Two (2) Cartridge Filter Dust Collection Systems, C1200 Two (2) Cartridge Filter Dust Collection Systems, C1300 Two (2) Cartridge Filter Dust Collection Systems

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	29.5 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-CONDMF41	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)
2. PM	0.01 lbs per 1000 lbs of exhaust gas calculated on a dry gas basis ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	R 336.1331(1)(c)
3. PM10	0.37 pph ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	40 CFR 52.21(c) and (d)
4. PM2.5	0.37 pph ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	40 CFR 52.21(c) and (d)

^a These limits apply separately to each plasma flux machines.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	57.4 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-CONDMF41	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-CONDMF41 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cartridge filter dust collection systems and thermal oxidizer are implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of

the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (C550A) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.31 pph, a minimum temperature of 1400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate a plasma flux machine (C1100, C1200, or C1300) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection systems includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, R 336.1910)**
3. The permittee shall not operate the oven degreaser (C550A) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (C550A) or a representative condenser area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the

submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² (R 336.1702(a))
4. Verification of PM, PM10 and PM2.5 emission rates, by testing at owner's expense, in accordance with Department requirements, may be required upon request of the AQD District Supervisor. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. A complete report of the test results shall be submitted to the AQD Technical Programs Unit and District Office, within 60 days following the last date of the test.² (R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1205, R 336.1702(a))
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² (R 336.1225, R 336.1702, R 336.1901)
3. The permittee shall keep the following information on a monthly basis for EU-CONDMF41:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-CONDMF41 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 40 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205, R 336.1702(a))

4. For EU-CONDMF41, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-CONDMF41 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C550A (Thermal Oxidizer)	16 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C550a (Brazing furnace preheat)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C550b (Brazing furnace exit)	28 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-C550c (Brazing furnace cooling)	52 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-C550d (Brazing furnace cooling)	52 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-C550e (Brazing furnace exit conveyor)	16 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-C550f (Brazing furnace entrance N2 purge and release valves – normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV-C550g (Brazing furnace exit N2 purge and release valves – normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV-C1038 (Welding)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV-C1000/C1300 (Plasma flux feed dust collector and flux spray dust collector)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV-C1000/C1300b (Plasma flux pre-heat exhaust)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
12. SV-C1200 (Plasma flux feed dust collector, flux spray dust collector, and pre-heat)	41 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
13. SV-C1131, 1231, 1331, 1221 (Bracket welding & tank assy)	24 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
14. SV-C1121, 1122 (modulator welding)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-CONDGIC2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A condenser manufacturing area consisting of metal stamping presses; metal cutting, welding, plasma fluxing (C1100, C1200, and C1300) and aqueous degreasing of small parts; metal forming of tubes/fins and mechanical assembly of cores with components; core oven degreasing (C1150A); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

C1150A Thermal Oxidizer, C1100 Two (2) Cartridge Filter Dust Collection Systems, C1200 Two (2) Cartridge Filter Dust Collection Systems, C1300 Two (2) Cartridge Filter Dust Collection Systems

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	30.5 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-CONDGIC2	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)
2. PM	0.01 lbs per 1000 lbs of exhaust gas calculated on a dry gas basis ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	R 336.1331(1)(c)
3. PM10	0.37 pph ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	40 CFR 52.21 (c) and (d)
4. PM2.5	0.37 pph ^{2a}	Hourly	C1100, C1200, and C1300 Plasma Flux Dust Collectors	SC III.1, SC IV.2 SC V.4	40 CFR 52.21 (c) and (d)

^a These limits apply separately to each plasma flux machines.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	70.3 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-CONDGIC2	SC VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU-CONDGIC2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cartridge filter dust collection systems and thermal oxidizer are implemented and maintained. The MAP shall, at a minimum, specify the following:

- a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (C1150A) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.54 pph, a minimum temperature of 1292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate a plasma flux machine (C1100, C1200, or C1300) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection systems includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, R 336.1910)**
3. The permittee shall not operate the oven degreaser (C1150A) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (C1150A) or a representative condenser area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and

District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² (R 336.1702(a))
4. Verification of PM, PM10 and PM2.5 emission rates, by testing at owner's expense, in accordance with Department requirements, may be required upon request of the AQD District Supervisor. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. A complete report of the test results shall be submitted to the AQD Technical Programs Unit and District Office, within 60 days following the last date of the test.² (R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1205, R 336.1225, R 336.1702(a))
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² (R 336.1225, R 336.1702)
3. The permittee shall keep the following information on a monthly basis for EU-CONDGIC2:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-CONDGIC2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 40 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205, R 336.1702(a))

4. For EU-CONDGIC2, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-CONDGIC2 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C1100/C1300 (Plasma flux feed dust collector and flux spray dust collector)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C1100b/C1300b (Plasma flux pre-heat exhaust)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C1131, 1231, 1331, 1221 (bracket welding & tank assy)	24 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-C1150A (Thermal Oxidizer)	20 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-C1150Ab (Oven degreaser binder chamber)	16 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-C1150 (Brazing furnace slow cooling)	30 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-C1150b (Brazing furnace heating chamber and blast cooling chamber)	30 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV-C1150c (Brazing furnace blast cooling chambers)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV-C1121, 1122 (Modulator welding)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV-C1200 (Plasma flux feed dust collector and flux spray dust collector and pre-heat)	41 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV-C1038 (Welding)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-EVAP1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

An evaporator manufacturing area consisting of metal stamping, degreasing (C801), fluxing, and cutting of small parts; metal forming of fins and mechanical assembly of cores with components; and brazing. Emissions from each oven degreaser are controlled by a separate thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

C801 Thermal Oxidizer, C801 Cartridge Filter Dust Collection System

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	36.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP1	SC V.1, V.2, VI.2, VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	31.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP1	SC VI.3	R 336.1205(1)(a)
2. Brazing flux with a VOC content of >1.0% by weight	75.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP1	SC VI.3	R 336.1205(1)(a)
3. Brazing flux with a VOC content of 1.0% and less by weight	169.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP1	SC VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-EVAP1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizers, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the small parts oven degreaser (C801) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.12 pph, a minimum temperature of 1400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the oven degreaser (C801) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall not operate brazing flux spray booth unless all respective exhaust filters are installed and operating in a satisfactory manner.² **(R 336.1224, R 336.1301, R 336.1331, 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (C801) or a representative evaporator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**

3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-EVAP1:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-EVAP1 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total usage of brazing flux by VOC content > 1.0% by weight and 1.0% or less by weight for EU-EVAP1 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - f. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 16.3 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-EVAP1, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-EVAP1 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C801a (Thermal Oxidizer Stack)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C801b (Flux Application Booth Exhaust)	8 ²	56 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C801c (Oven Degreaser entrance/exit)	4 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-EVAP2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

An evaporator manufacturing area consisting of metal stamping, degreasing (C852), fluxing, and cutting of small parts; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (C884); and brazing. Emissions from each oven degreaser are controlled by a separate thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

C852 Thermal Oxidizer, C884 Thermal Oxidizer, C854 Cartridge Filter Dust Collection System, E310 Two (2) Cartridge Filter Dust Collection Systems

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	36.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP2	SC V.1, V.2, VI.2, VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	23.4 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-EVAP2	SC VI.3	R 336.1205(1)(a) R 336.1225
2. Brazing flux with a VOC content of >1.0% by weight	55.2 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-EVAP2	SC VI.3	R 336.1205(1)(a) R 336.1225
3. Brazing flux with a VOC content of ≤1.0% by weight	169.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP2	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-EVAP2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizers and plasma flux machine (E310), is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of

the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the small parts oven degreaser (C852) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.12 pph, a minimum temperature of 1400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the core oven degreaser (C884) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.30 pph, a minimum temperature of 1400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall not operate the oven degreasers (C852 and C884) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall not operate the plasma flux machine (E310) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection system includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (C852 or C884) or a representative evaporator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical

Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**

2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-EVAP2:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-EVAP2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total usage of brazing flux by VOC content > 1.0% by weight and 1.0% or less by weight for EU-EVAP2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - f. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 16.3 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-EVAP2, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-EVAP2 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C884 (Thermal Oxidizer)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C852 (Thermal Oxidizer)	14 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C885a (Brazing furnace preheat)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-C885b (Brazing furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-C885c (Brazing furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-C885d (Brazing furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-C885e (Brazing furnace purge - normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV-C885f (Brazing furnace purge - normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV-C885g (Brazing furnace exit)	6 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV-E310a (Plasma Flux feed dust collector and flux spray dust collector)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV-E310b (Plasma Flux pre-heat exhaust)	8 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-EVAP4
 EMISSION UNIT CONDITIONS**

DESCRIPTION

An evaporator manufacturing area consisting of metal stamping, degreasing (C902), fluxing and cutting of small parts; plasma fluxing and metal forming of tubes/fins, and mechanical assembly of cores with components; core oven degreasing (C924); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

E210 Two (2) Cartridge Filter Dust Collection Systems, C902 One Cartridge Filter Dust Collection System

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	26.6 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-EVAP4	SC V.1, V.2, SC VI.2, VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	26.6 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-EVAP4	SC VI.3	R 336.1205(1)(a)
2. Brazing flux with a VOC content of >1.0% by weight	55.2 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-EVAP4	SC VI.3	R 336.1205(1)(a) R 336.1225
3. Brazing flux with a VOC content of ≤1.0% by weight	169.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAP4	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-EVAP4 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the E210 and C902 cartridge filter dust collection systems, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the plasma flux machine (E210) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection systems includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, R 336.1910)**
2. The permittee shall not operate the flux machine (C902) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection systems includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, 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. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**

3. The permittee shall keep the following information on a monthly basis for EU-EVAP4:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-EVAP4 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total usage of brazing flux by VOC content > 1.0% by weight and 1.0% or less by weight for EU-EVAP4 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - f. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 16.3 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-EVAP4, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-EVAP4 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C902a (Oven Degreaser)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C902b (Oven Degreaser cooling zone)	30 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C902c (Flux application dust collector)	18 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4. SV-C902d (Flux drying oven)	24 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-C924 (Oven Degreaser)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-C925a (Brazing Furnace Preheat)	30 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-C925b (Brazing Furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV-C925c (Brazing Furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV-C925d (Brazing Furnace cooling)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV-C925e (Brazing Furnace exit)	8 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV-C925f (Brazing Furnace purge – normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
12. SV-C925g (Brazing Furnace purge – normally closed)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
13. SV-E210a (Plasma Flux feed dust collector and flux spray dust collector)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
14. SV-E210b (Plasma Flux pre-heat exhaust)	8 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-EVAP5
 EMISSION UNIT CONDITIONS**

DESCRIPTION

An evaporator manufacturing area consisting of metal forming of fins and mechanical assembly of cores with components; core oven degreasing (E124); and brazing.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	21.6 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-EVAP5	SC V.1, VI.2, VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	21.6 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-EVAP5	SC VI.3	R 336.1205(1)(a)

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. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-EVAP5:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-EVAP5 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 16.3 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

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 any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-E124 (Oven Degreaser)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-E125a (Brazing furnace preheat)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-E125b (Brazing furnace cooling zone)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-E125c (Brazing furnace cooling zone)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-EVAPCS2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

An evaporator manufacturing area consisting of case assembly, metal forming of fins and mechanical assembly of cores with components, core oven degreasing (E320A), and brazing (E320). Oven degreaser emissions are controlled by the E320A thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

E320A Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	7.3 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-EVAPCS2	SC V.1, V.2, V.3, VI.2, VI.3	R 336.1225 R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	35.4 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-EVAPCS2	SC VI.3	R 336.1225 R 336.1702(a) R 336.1205

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-EVAPCS2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (E320A) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.34 pph, a minimum temperature of 1,292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the oven degreaser (E320A) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (E320A) or a representative evaporator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Safety

Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² (R 336.1225, R 336.1702)

3. The permittee shall keep the following information on a monthly basis for EU-EVAPCS2:
 - a. Gallons or pounds of each material (machining oils cleaning solvent, and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of each machining oil for EU-EVAPSC2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 16.3 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205, R 336.1225, R 336.1702(a))

4. For EU-EVAPCS2, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-EVAPCS2 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-E320Aa (Thermal Oxidizer)	32 ²	50 ²	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-E320Ab (Oven Degreaser binder chamber)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SV-E320 (Brazeing Furnace retention/exit/cooling chambers)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-EVAPSP4
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Small parts manufacturing area consisting of a metal stamping press, small parts degreaser (E303), and small parts fluxing (E304).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Cartridge Filter Dust Collection System

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	13.6 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAPSP4	SC V.1, VI.2, VI.3	R 336.1205 R 336.702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oil	12.8 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAPSP4	SC VI.3	R 336.1205 R 336.1225 R 336.1702(a)
2. Brazing flux with a VOC content of ≤1.0% by weight	120.6 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-EVAPSP4	SC VI.3	R 336.1205 R 336.1225 R 336.1702(a)

- The permittee shall not use brazing flux in EU-EVAPSP4 with a VOC content greater than 1 percent by weight.² (**R 336.1205, R 336.1225, R 336.1702(a)**)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU-EVAPSP4 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cartridge filter dust collection system, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the flux machine (E304) unless the associated cartridge filter dust collection system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the cartridge filter dust collection systems includes operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1225, R 336.1331, 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 each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-EVAPSP4:
 - a. Gallons or pounds of each material (machining oil and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of machining oil for EU-EVAPSP4 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total usage of brazing flux in tons per 12-month rolling time period as determined at the end of each calendar month.
 - f. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205, R 336.1225, R 336.1702(a))

- For EU-EVAPSP4, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-EVAPSP4 and any control device are operated and maintained according to the approved MAP in SC III.1. The permittee shall keep all records on file and make them available to the department upon request. (R 336.1213(3))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-E303 (Oven degreaser)	12 ²	50 ²	R 336.1225 40 CFR 52.21(c) & (d)
2. SV-E304a (Flux Mixing and application)	18 ²	50 ²	R 336.1225 40 CFR 52.21(c) & (d)
3. SV-E304c (Flux cooling zone)	18 ²	50 ²	R 336.1225 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-GASTANK
EMISSION UNIT CONDITIONS**

DESCRIPTION

An existing stationary gasoline dispensing facility located at an area source of hazardous air pollutant that has a maximum monthly gasoline throughput of <10,000 gallons.

Flexible Group ID: NA

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 gasoline to be handled in a manner that would result in a vapor release to the atmosphere for extended periods of time. **(40 CFR 63.11116(a))**
2. The permittee shall minimize gasoline spills. **(40 CFR 63.11116(a)(1))**
3. Spills shall be cleaned up as expeditiously as practicable. **(40 CFR 63/11116(a)(2))**
4. The permittee shall cover all open gasoline containers and all gasoline storage tank fill pipes with a gasketed seal when not in use. **(40 CFR 63.11116(a)(3))**
 - a. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F are considered acceptable for compliance with SC III.4.

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. The permittee shall keep a record of gasoline throughput to be able to demonstrate that monthly throughput is less than 10,000 gallons and such record must be made available to USEPA or to EGLE with 24 hours of a request. **(40 CFR 63.11116(b))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the Gasoline Distribution GACT as specified in 40 CFR Part 63, Subpart CCCCCC. **(40 CFR Part 63, Subpart CCCCCC)**
2. If the permittee's affected source's throughput ever exceeds an applicable throughput threshold, then permittee's affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold. **(40 CFR 63.11111(i))**

Footnotes:

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

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

**EU-RDR1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R540); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

R540 Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	19.0 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-RDR1	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oils	38.7 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR1	SC VI.3	R 336.1205(1)(a) R 336.1225
2. Bonderite Weld Tube Mill Machining Oil	882 gallons per year ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR1	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-RDR1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (R540) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.54 pph, a minimum temperature of 1,292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the oven degreaser (R540) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (R540) or a representative radiator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1225, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-RDR1:
 - a. Gallons or pounds of each material (machining oils cleaning solvent, and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of each machining oil for EU-RDR1 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 38.5 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1225, R 336.1702(a))**

4. For EU-RDR1, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-RDR1 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-R100, R500, R502 (Weld tube mills)	31 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV-R102, R104 (Weld tube mills)	25 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-R1000, R400 (Paint flux pre-heat, drying air filter, and weld tube mill)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-R540 (Thermal oxidizer)	20 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-R540 (Oven degreaser binder chamber)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-R550 (Brazing furnace heating chamber/cooling chambers)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-R550 (Brazing furnace insulation chamber/cooling pipe/cooling chamber)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. On and after September 30, 2017, the permittee shall not use Dairoll Weld Tube Mill Machining Oil in EU-RDR1.¹ **(R 336.1225)**

Footnotes:

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

**EU-RDR2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R140); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

R140 Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	22.3 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-RDR2	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oils	44.9 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR2	SC VI.3	R 336.1205(1)(a) R 336.1225
2. Bonderite Weld Tube Mill Machining Oil	882 gallons per year ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR2	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-RDR2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (R140) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.42 pph, a minimum temperature of 1,400°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate the oven degreaser (R140) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (R140) or a representative radiator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702(a))**

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1225, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-RDR2:
 - a. Gallons or pounds of each material (machining oil, cleaning solvent, and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of each machining oil for EU-RDR2 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 38.5 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-RDR2, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-RDR2 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-R140 (Thermal Oxidizer)	32 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV-R150 (Brazing furnace)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-R102, R104 (Weld tube mills)	25 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-R100, R500, R502 (Weld tube mills)	31 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-R1000, R400 (Paint flux pre-heat, drying air filter, and weld tube mill)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-R968 (Repair curing and drying oven)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-R228 (Repair curing and drying oven)	NA ²	NA ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. On and after September 30, 2017, the permittee shall not use Dairoll Weld Tube Mill Machining Oil in EU-RDR2.¹ **(R 336.1225)**

Footnotes:

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

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

**EU-RDR3
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A radiator manufacturing area consisting of metal stamping presses and tube mills; metal forming of fins and mechanical assembly of cores with components; core oven degreasing (R640); and brazing. Emissions from the oven degreaser are controlled by a thermal oxidizer.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

R640 Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	22.4 tpy ²	12-month rolling time period as determined at the end of the calendar month	EU-RDR3	SC VI.2 SC VI.3	R 336.1205(3) R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Machining Oils	53.7 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR3	SC VI.3	R 336.1205(1)(a) R 336.1225
2. Bonderite Weld Tube Mill Machining Oil	882 gallons per year ²	12-month rolling time period as determined at the end of each calendar month.	EU-RDR3	SC VI.3	R 336.1205(1)(a) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-RDR3 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the thermal oxidizer is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

- d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the core oven degreaser (R640) unless the associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 0.38 pph, a minimum temperature of 1,292°F, a minimum retention time of 0.5 seconds, and operating and maintaining the control device in accordance with an approved MAP as required in SC III.1.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall not operate the oven degreaser (R640) unless a device which continuously monitors the temperature on the thermal oxidizer, and an automatic sound and visual alarm system that activates at a temperature below the minimum thermal oxidizer limit are installed, calibrated, maintained, and operated in a satisfactory manner.² (R 336.1205, R 336.1225, R 336.1702(a), 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 permittee shall verify the VOC destruction efficiency and VOC emission rate for the thermal oxidizer on the oven degreaser (R640) or a representative radiator area thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency and emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
2. Annually, the permittee shall determine the uncaptured percentage of machine oil VOC emissions released to the general plant air, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
3. The VOC content, water content and density of each brazing flux material used, shall be determined using federal Reference Test Method 24 or manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² (R 336.1702(a))

VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1205, R 336.1225, R 336.1702(a))

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, the VOC content, and density. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU-RDR3:
 - a. Gallons or pounds of each material (machining oil, cleaning solvent, and brazing flux) used.
 - b. Where applicable, gallons or pounds of each material reclaimed.
 - c. VOC content, in pounds per gallon or pounds per pound, of each material used.
 - d. Total usage of each machining oil for EU-RDR3 in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Total VOC emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (A maximum uncaptured percentage of machine oil VOC emissions of 38.5 percent or a three-year average of the most recent uncaptured percentage estimates that have been approved by the AQD District Supervisor may be used.)

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a))**

4. For EU-RDR3, the permittee shall keep in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that EU-RDR3 and any control device are operated and maintained according to the approved MAP in SC III.1. 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. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-R640a (Thermal Oxidizer)	32 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV-R640b (Oven degreaser binder chamber)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-R650a (Brazing furnace heating chamber/cooling chambers)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
4. SV-R650b (Brazing furnace insulation chamber/cooling pipe/cooling chambers)	44 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-R102, R104 (Weld tube mills)	25 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-R100, R500, R502 (Weld tube mills)	31 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-R1000, R400 (Paint flux pre-heat, drying air filter, and weld tube mill)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. On and after September 30, 2017, the permittee shall not use Dairoll Weld Tube Mill Machining Oil in EU-RDR3.¹ **(R 336.1225)**

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL 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-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(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-RULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EU-RULE 290
FG-MACT-ZZZZ ≤500HP	Existing stationary spark ignition or compression ignition (CI) emergency reciprocating internal combustion engines (RICE), with a rating of less than or equal to 500 HP and constructed prior to June 12, 2006.	EU-FAG #1 EU-FAG #2 EU-FAG #3 EU-FAG #5 EU-FAG #6 EU-FIRE PUMP #1 EU-FIRE PUMP #2
FG-NSPS-JJJJ	Stationery spark ignition lean burn reciprocating internal combustion engines combusting natural gas fuel, producing greater than 25 hp (19 KW) but less than 500 hp, that were constructed, on or after June 12, 2006, and used to power emergency use generators.	EU-FAG #7
FG-SURFACECOAT	RS surface treatment processes C-832, C-833, C-834, and C-933 in the evaporator manufacturing area.	EU-C832 EU-C833 EU-C834 EU-C933

FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(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-COLD CLEANERS

POLLUTION CONTROL EQUIPMENT

NA

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(2)(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(2)(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

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 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(2)(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 a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, used in each cold cleaner. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**
- 4. 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))**
- 5. 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-RULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EU-RULE 290

POLLUTION CONTROL EQUIPMENT

NA

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(2)(a)(i))**
2. Any emission unit for which CO₂ equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other 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(2)(a)(ii))**
 - a. For toxic 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 micrograms 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(2)(a)(ii)(A))**
 - b. For toxic 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(2)(a)(ii)(B))**
 - c. The emission unit shall not emit any toxic 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(2)(a)(ii)(C))**
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(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 exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(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)**
- 2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
 - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
 - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - ii. Wet scrubbers equipped with a liquid flow rate monitor.
 - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

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. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a 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(2)(a)(ii) and (iii). **(R 336.1213(3))**

- e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in enough detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
 - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
- 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(2)(c), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(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(2)(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))**

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-MACT-ZZZZ ≤500HP
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 an area source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.

Emission Units: EU-FAG #1, EU-FAG #2, EU-FAG #3, EU-FAG #5, EU-FAG #6, EU-FIRE PUMP #1, EU-FIRE PUMP #2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 63.6604(b), 40 CFR 1090.305)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must comply with the requirements in Item 4 of Table 2d of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-MACT-ZZZZ≤500HP as specified in the following:
 - 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.
 - 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 management practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management 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 management practice on the schedule required and the Federal, State, or local law or which the risk was deemed unacceptable. **(40 CFR 63.6603(a), 40 CFR Part 63, Subpart ZZZZ, Table 2d.4)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. **(40 CFR 63.6625(i))**

3. The permittee shall operate and maintain each engine in FG-MACT-ZZZZ≤500HP and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a 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), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
4. For each engine in FG-MACT-ZZZZ≤500HP, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time 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 may operate each engine in FG-MACT-ZZZZ≤500HP for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
6. Each engine in FG-MACT-ZZZZ≤500HP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in **SC III.5**. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(4))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-MACT-ZZZZ≤500HP with non-resettable hours meters to track the operating hours. **(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, 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 Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee 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 permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee 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(i))**

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-MACT-ZZZZ≤500HP, the permittee shall keep in a satisfactory manner the following:
 - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted,

- b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
- c. Records of performance tests and performance evaluations,
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment,
- e. 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), 40 CFR 63.6660)**

- 2. For each engine in FG-MACT-ZZZZ≤500HP, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow a maintenance plan that provides 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. 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, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
- 3. For each engine in FG-MACT-ZZZZ≤500HP, 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)**
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-MACT-ZZZZ≤500HP on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG-MACT-ZZZZ≤500HP on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3) 40 CFR 63.6655(f), 40 CFR 63.6660)**
- 5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG-MACT-ZZZZ≤500HP, demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3), 40 CFR 1090.305)**
- 6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
- 7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.6660(b))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

Footnotes:

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

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

**FG-NSPS-JJJJ
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Natural gas-fired lean burn emergency engines greater than 25 hp (19 KW) but less than 500 hp subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE). The emergency SI ICE commenced construction after June 12, 2006 and was manufactured on or after January 1, 2009.

Emission Unit: EU-FAG # 7

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx + HC	10 g/HP-hr	Hourly	Each engine in FG-NSPS-JJJJ	SC V.1, SC VI.1	40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ
2. CO	387 g/HP-hr	Hourly	Each engine in FG-NSPS-JJJJ	SC V.1, SC VI.1	40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ

HC – hydrocarbon

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate each engine in FG-NSPS-JJJJ for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2))**
2. Each engine in FG-NSPS-JJJJ may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.1. Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**
3. If each engine in FG-NSPS-JJJJ is operated as a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements: **(40 CFR 60.4243(a))**

- a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
- b. Meet the requirements as specified in 40 CFR 1068 Subparts A through D, as applicable, including labeling and maintaining certified engines according to the manufacturer's recommendations,
- c. Only change those engine settings that are permitted by the manufacturer.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and be subject to SC III.4. **(40 CFR 60.4243(b)(1))**

4. If any engine in FG-NSPS-JJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60, Subpart JJJJ, the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee must install and maintain a non-resettable hour meter on each engine in FG-NSPS-JJJJ. **(R 336.1213(3), 40 CFR 60.4237)**

V. TESTING/SAMPLING

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

1. If any engine in FG-NSPS-JJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60, Subpart JJJJ, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits in SC I.1 – I.2 within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup, or within 1 year after the engine is no longer operated as a certified engine.
 - b. The performance tests shall consist of three separate test runs of at least 1 hour, for each performance test required in 40 CFR 60.4244 and Table 2 to 40 CFR Part 60, Subpart JJJJ.
 - c. Subsequent performance testing shall be completed every 8,760 hours of engine operation or every 3 years, whichever comes first, to demonstrate compliance with the applicable emission limits.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60, Subpart JJJJ)**

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, in a satisfactory manner, the following records for each engine in FG-NSPS-JJJJ:
 - a. If certified: The permittee shall keep records of the documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
 - b. If non-certified: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FG-NSPS-JJJJ:
 - a. If certified: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that the engine has been maintained according to them, as specified in SC III.3.
 - b. If non-certified: The permittee shall keep records of a maintenance plan, as required by SC III.4 and records of conducted maintenance.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4243, 40 CFR 60.4245(a))**

3. The permittee must keep records of the hours of operation for each engine in FG-NSPS-JJJJ that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4243, 40 CFR 60.4245(b))**
4. The permittee must keep records of all notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification for each engine in FG-NSPS-JJJJ. **(R 336.1213(3), 40 CFR 60.4245(a))**

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 any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee shall submit a notification specifying whether each engine in FG-NSPS-JJJJ will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of each engine and within 30 days of switching the manner of operation. **(R 336.1213(3), 40 CFR Part 60, Subpart JJJJ)**
6. If own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in 40 CFR 60.4243(d)(3)(i), the permittee must submit an annual report to the AQD District Supervisor according to the following requirements: **(40 CFR 60.4245(e))**
 - a. The report must contain the following information:
 - i. Company name and address where the engine is located. **(40 CFR 60.4245(e)(1)(i))**
 - ii. Date of the report and beginning and ending dates of the reporting period. **(40 CFR 60.4245(e)(1)(ii))**
 - iii. Engine site rating and model year. **(40 CFR 60.4245(e)(1)(iii))**
 - iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. **(40 CFR 60.4245(e)(1)(iv))**
 - v. Hours spent for operation for the purposes specified in 40 CFR 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. **(40 CFR 60.4245(e)(1)(vii))**

- b. The annual report must also be submitted electronically to the EPA using the 40 CFR Part 60, Subpart JJJJ specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to the subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the EPA at the appropriate address listed in 40 CFR 60.4. **(40 CFR 60.4245(e)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FG-NSPS-JJJJ. **(40 CFR Part 60, Subparts A & JJJJ)**
2. FG-NSPS-JJJJ must meet the requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ) by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. No further requirements apply for such engines under 40 CFR Part 63, Subpart ZZZZ. **(40 CFR 63.6590(c))**

Footnotes:

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

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

**FG-SURFACECOAT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

RS surface treatment processes C-832, C-833, C-834, and C-933 in the evaporator manufacturing area.

Emission Units: EU-C832, EU-C833, EU-C834, EU-C933

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	30.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-SURFACECOAT	SCVI.2 SCVI.3	R 336.1702(d)
2. VOC	10.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	Each emission unit in FG-SURFACECOAT	SC VI.2 SC VI.3	R 336.1702(d)
3. VOC	2,000 lb/month ²	Calendar Month	Each emission unit in FG-SURFACECOAT	SC VI.2 SC VI.3	R 336.1702(d)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall handle all VOC and / or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.² **(R 336.1205(3), R 336.1224, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² **(R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(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 complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² **(R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, reducer, and purge/clean-up solvent, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer’s formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for FG-SURFACECOAT:
 - a. Gallons (with water) of each coating, reducer, and purge/clean-up solvent used and reclaimed.
 - b. VOC content (with water) of each coating, reducer, and purge/clean-up solvent as applied.
 - c. VOC mass emission calculations determining the monthly emission rate in pounds and tons per calendar month for each emission unit and the flexible group.
 - d. 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 for each emission unit and the flexible group.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1702(d))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C832a (Hot Water Bath Vent)	8 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV-C832b (Original Acid Baths)	12 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV-C832c (Back Baths)	22 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4. SV-C832d (Neutralization Baths)	10 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV-C832e (Oven)	14 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV-C832f (Oven Cooling)	18 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV-C832g (Oven Cooling)	18 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV-C832h (Acid Bath)	13.5 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV-C833a (Oven)	26 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV-C833b (Oven)	15 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV-C833c (Back Bath)	22 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
12. SV 833d (Acid Bath)	13.5 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
13. SV-C834a (Oven)	15 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
14. SV-C834b (Oven)	15 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
15. SV-C834c (Oven)	15 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
16. SV-C834d (Back Bath Exhaust)	22 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
17. SV-C834e (Acid Bath)	13.5 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
18. SV- C933a (Back Baths)	24 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
19. SV- C933b (Hot Water Bath Vent)	6 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
20. SV- C933c (Oven)	16 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
21. SV- C933d (Oven Cooling)	24 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)
22. SV-C933e (Acid Bath)	13.5 ²	50 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

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. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. 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-N1192-2017. 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-N1192-2017c is being reissued as Source-Wide PTI No. MI-PTI-N1192-2023.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
94-18	NA	Evaporator manufacturing area consisting of case assembly, metal forming of fins and mechanical assembly of cores with components, core oven degreasing (E320A), and brazing (E320). Oven degreaser emissions are controlled by the E320A thermal oxidizer.	EU-EVAPCS2
138-17	NA	Small parts manufacturing area consisting of a metal stamping press, small parts degreaser (E303), and small parts fluxing (E304).	EU-EVAPSP4

Appendix 7. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, 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.