

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

EFFECTIVE DATE: June 18, 2020

ISSUED TO

Plastic Plate Kraft

State Registration Number (SRN): N7374

LOCATED AT

5675 Kraft Avenue SE, Grand Rapids, Kent County, Michigan 49512

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N7374-2020

Expiration Date: June 18, 2025

Administratively Complete ROP Renewal Application
Due Between December 18, 2023 and December 18, 2024

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-N7374-2020

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

Heidi Hollenbach, Grand Rapids District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS.....	4
Permit Enforceability	4
General Provisions.....	4
Equipment & Design	5
Emission Limits.....	5
Testing/Sampling	5
Monitoring/Recordkeeping	6
Certification & Reporting	6
Permit Shield	7
Revisions	8
Reopenings.....	8
Renewals.....	9
Stratospheric Ozone Protection	9
Risk Management Plan.....	9
Emission Trading.....	9
Permit to Install (PTI).....	10
B. SOURCE-WIDE CONDITIONS	11
C. EMISSION UNIT SPECIAL CONDITIONS	12
EMISSION UNIT SUMMARY TABLE.....	12
EUCONDITIONER.....	14
EUPREETCHTANK	17
EUCHROMEETCH	19
EUELECTROLESSCU.....	22
EUKPGENSET	25
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	28
FLEXIBLE GROUP SUMMARY TABLE.....	28
FGNEUTCATACC	29
FGCOPPER.....	31
FGNICKEL.....	33
FGCHROME1.....	36
FGSTRIPTANKS	40
FGBOILERS	43
E. NON-APPLICABLE REQUIREMENTS	51
APPENDICES	52
Appendix 1. Acronyms and Abbreviations.....	52
Appendix 2. Schedule of Compliance.....	53
Appendix 3. Monitoring Requirements	53
Appendix 4. Recordkeeping	53
Appendix 5. Testing Procedures	53
Appendix 6. Permits to Install.....	53
Appendix 7. Emission Calculations	54
Appendix 8. Reporting	54

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.

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
EUCONDITIONER	This emission unit consists of one (1) tank that is controlled by a packed bed scrubber system with mist eliminators. The tank contains 1,3-dichloro-2-propanol (DCP).	07-15-2013	NA
EUPREETCHTANK	This emission unit consists of one (1) tank used to pre-etch plastic parts prior to plating. This tank is exhausted through a common packed bed scrubber with mist eliminator with an existing conditioner tank.	03-01-2020	NA
EUCHROMEETCH	This emission unit consists of three (3) hexavalent chromic acid etch tanks controlled by one common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension. The tanks contain chromic acid and sulfuric acid.	07-15-2013	NA
EUNEUTRALIZER	This emission unit consists of one sulfuric acid tank.	07-15-2013	FGNEUTCATACC
EUCATALYST	This emission unit consists of one hydrochloric acid tank.	07-15-2013	FGNEUTCATACC
EUACCELERATOR	This emission unit consists of one hydrochloric acid tank.	07-15-2013	FGNEUTCATACC
EUCATALYST2	This emission unit consists of one hydrochloric acid tank.	10-31-2017	FGNEUTCATACC
EUELECTROLESSCU	This emission unit consists of one electroless copper tank controlled by a packed bed scrubber system with mist eliminators.	07-15-2013	NA
EUCUSTRIKE	This emission unit consists of one copper strike tank. Copper strike tank contains copper sulfate and sulfuric acid.	07-15-2013	FGCOPPER
EUACIDCU	This emission unit consists of six (6) acid copper tanks. Process tanks contain copper sulfate, ferrous sulfate and sulfuric acid.	07-15-2013	FGCOPPER

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUSEMIBRNI	This emission unit consists of five (5) semi brite nickel tanks. Semi-brite nickel plating tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.	07-15-2013	FGNICKEL
EUBRITENI	This emission unit consists of two (2) brite nickel tanks. Brite nickel plating tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.	07-15-2013	FGNICKEL
EUPLATINUM	This emission unit consists of six (6) platinum/nickel tanks. The process tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.	07-15-2013	FGNICKEL
EUDURNINI	This emission unit consists of one (1) durni (micro-porous) nickel tank. The process tank contains nickel sulfate, nickel chloride, formaldehyde and boric acid.	07-15-2013	FGNICKEL
EUCHROME1	Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.	07-15-2013	FGCHROME1
EUCHROME2	Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.	07-15-2013	FGCHROME1
EUCHROME3	Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.	07-15-2013	FGCHROME1
EUCHROMESTRIP	Chrome strip tank containing sodium hydroxide controlled by a packed bed scrubber with mist eliminators. The scrubber system is shared with the nitric strip tank.	07-15-2013	FGSTRIPTANKS
EUNITRICSTRIP	Nitric acid strip tank controlled by a packed bed scrubber with mist eliminators. The scrubber system is shared with the chrome strip tank.	07-15-2013	FGSTRIPTANKS
EUBOILER1	1.8 MMBTU/hr natural gas fired boiler	07-15-2013	FGBOILERS
EUBOILER2	1.8 MMBTU/hr natural gas fired boiler	07-15-2013	FGBOILERS
EUBOILER3	1.8 MMBTU/hr natural gas fired boiler	07-15-2013	FGBOILERS
EUBOILER4	1.8 MMBTU/hr natural gas fired boiler	07-15-2013	FGBOILERS
EUBOILER5	1.8 MMBTU/hr natural gas fired boiler	07-15-2013	FGBOILERS
EUKPGENSET	One 190 brake horsepower, natural gas fueled, 4 stroke rich burn (4SRB), spark ignition reciprocating internal combustion engine designed to provide 125 kW of emergency electrical power.	07-15-2013	NA

**EUCONDITIONER
 EMISSION UNIT CONDITIONS**

DESCRIPTION

This emission unit consists of one (1) tank that is controlled by a packed bed scrubber system with mist eliminators. The tank contains 1,3-dichloro-2-propanol (DCP).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber system with mist eliminators.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. 1,3-dichloro-2-propanol (DCP)	1.5 lb/hr ²	Hourly	EUCONDITIONER	SC V.1, VI.1, VI.2	R 336.1225 R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUCONDITIONER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 PARAMETERS

1. The permittee shall not operate EUCONDITIONER unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for EUCONDITIONER on a continuous basis.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for EUCONDITIONER on a continuous basis.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

V. TESTING/SAMPLING

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

1. Every 48 months from the date of completion of the most recent stack test the permittee shall verify the hourly 1,3-dichloro-2-propanol (DCP) emission rate from EUCONDITIONER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A, Reference Method 18. 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 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213)**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform inspections of the packed bed scrubber system as follows:² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**
 - a. Determine pressure drop across the packed bed scrubber once each day that the associated tank(s) is operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
 - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
 - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system on file and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

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 RESTRICTIONS

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. SVK1	20 ¹	85 ¹	R 336.1225, R 336.1901

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).

**EUPREETHTANK
 EMISSION UNIT CONDITIONS**

DESCRIPTION

One tank used to pre-etch plastic parts prior to plating. This tank is exhausted through a common packed bed scrubber with mist eliminator with an existing conditioner tank.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber system with mist eliminators

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOCs	595 lbs per year ²	12-month rolling time period as determined at the end of each calendar month	EUPREETHTANK	SC VI.1 SC VI.2	R 336.1225 R 336.1702(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))**

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, in a manner acceptable to the AQD District Supervisor, of the composition of all additives used in EUPREETHTANK and of the maximum concentration in the tank of all components of the additives that are VOCs.² **(R 336.1702(a))**
2. The permittee shall calculate the VOC emission rate from EUPREETHTANK on a monthly and 12-month rolling basis using aeration calculation methods such as Equation 4 from AP-42 chapter 12.20 or an alternate method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(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. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPREETHTANK.² **(R 336.1201(7)(a))**
5. Within 7 days of changing the configuration of the exhaust flow path of EUPREETHTANK, as allowed in SC VIII.1, the permittee shall submit written notification of the change to the AQD District Supervisor.¹ **(R 336.1225)**

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. SVK1*	20 ¹	85 ¹	R 336.1225

*As an alternative, EUPREETHTANK may be exhausted to the in-plant environment

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).

**EUCHROMEETCH
 EMISSION UNIT CONDITIONS**

DESCRIPTION

This emission unit consists of three (3) hexavalent chromic acid etch tanks controlled by one common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension. The tanks contain chromic acid and sulfuric acid.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

A common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total Chromium	0.016 mg/dscm ¹	Hourly	EUCHROMEETCH	SC V.1, VI.1, VI.2, VI.3, VI.4	R 336.1225
2. Total Chromium	0.0032 lb/hr ¹	Hourly	EUCHROMEETCH	SC V.1, VI.1, VI.2, VI.3, VI.4	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in EUCHROMEETCH unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the composite mesh pad scrubber system is implemented and maintained. 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 336.1910, R 336.1911**)
2. The permittee shall not operate any tank in EUCHROMEETCH unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of each tank does not exceed, at any time during operation, the surface tension as specified in the MAP or the surface tension as measured during the most recent stack test, whichever is lower.² (**R 336.1225, R 336.1901, R 336.1910**)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUCHROMEETCH unless the composite mesh pad scrubber system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the composite mesh pad as specified by the manufacturer. All manufacturer

specifications shall be included in the MAP, as required in SC III.1.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across each stage of the composite mesh pad scrubber system for EUCHROMEETCH on a continuous basis.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for each stage of the composite mesh pad scrubber system for EUCHROMEETCH during each associated wash down cycle.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

V. TESTING/SAMPLING

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

1. Every 24 months from the date of completion of the most recent stack test the permittee shall verify the hourly total chromium emission rate from EUCHROMEETCH by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A, Reference Method 306. 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.¹ **(R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform inspections of the composite mesh pad (CMP) system for EUCHROMEETCH as follows:² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
 - a. Determine pressure drop across the CMP scrubber system once each day that the associated tanks are operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b. Visually inspect the CMP system, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on the pads, and no evidence of chemical attack on the structural integrity of the control device.
 - c. Visually inspect the back portion of the mesh pad closest to the fan, on a quarterly basis, to ensure there is no breakthrough of chromic acid mist.
 - d. Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there are no leaks.
 - e. Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations. The permittee shall monitor the water flow during the wash down cycles for each stage on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the composite mesh pad scrubber system for EUCHROMEETCH on file and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

3. The permittee shall monitor the surface tension of each tank in EUCHROMEETCH once every four (4) hours of tank operation for the first 40 hours of tank operation. If there are no exceedances during the first 40 hours of tank operation, then surface tension measurements may be conducted once every eight (8) hours of tank operation for the next 40 hours of tank operation. If there are no exceedances during the 40 hours of tank operation when surface tension measurements are being conducted every eight (8) hours, then surface tension measurements may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every four (4) hours must be resumed and the subsequent decrease in frequency shall follow the schedule as laid out above. The minimum frequency of monitoring allowed is once every 40 hours of tank operation. An example of acceptable monitoring frequency is available at 40 CFR 63.343(c)(5)(ii)(C). The surface tension shall be monitored with a stalagmometer or tensiometer as specified in Method 306B of 40 CFR Part 63, Subpart N or an alternative method may be used if approved by the District Supervisor.² **(R 336.1225, R 336.1901, R 336.1910)**
4. The permittee shall keep records of the surface tension of each tank in EUCHROMEETCH, the amount of chemical fume suppressant added to each tank in EUCHROMEETCH and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1225, R 336.1901, R 336.1910)**

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 RESTRICTIONS

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. SVK2	60 ¹	85 ¹	R 336.1225, R 336.1901

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).

**EUELECTROLESSCU
 EMISSION UNIT CONDITIONS**

DESCRIPTION

This emission unit consists of one electroless copper tank controlled by a packed bed scrubber system with mist eliminators.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber system with mist eliminators.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Formaldehyde	1.1 lb/hr ^{2, 3}	Hourly	EUELECTROLESSCU	SC VI.1, VI.2 V.1	R 336.1225 R 336.1702 R 336.1299 40 CFR 63.40
2. Methanol	9.00 lb/hr ^{2, 3}	Hourly	EUELECTROLESSCU	SC VI.1, VI.2 V.1	R 336.1225 R 336.1702 R 336.1299 40 CFR 63.40
3. Sodium Hydroxide	0.22 lb/hr ¹	Hourly	EUELECTROLESSCU	SC VI.1, VI.2 V.1	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall not operate EUELECTROLESSCU unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 PARAMETERS

- The permittee shall not operate EUELECTROLESSCU unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for EUELECTROLESSCU on a continuous basis.² (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for EUELECTROLESSCU on a continuous basis.² (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)

V. TESTING/SAMPLING

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

1. Every 48 months from the date of completion of the most recent stack test, the permittee shall verify the hourly formaldehyde, methanol and sodium hydroxide emission rates from EUELECTROLESSCU 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. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
Formaldehyde	40 CFR, Part 60, Appendix A
Methanol	40 CFR, Part 60, Appendix A
Sodium Hydroxide	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 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, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit 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 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform inspections of the packed bed scrubber system for EUELECTROLESSCU as follows:² (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)
 - a. Determine pressure drop across the packed bed scrubber once each day that the associated tank is operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
 - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.

- d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
 - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system for EUELECTROLESSCU on file and make them available to the Department upon request.² (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)

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 RESTRICTIONS

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. SVK4	44 ¹	85 ¹	R 336.1225, R 336.1901

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).
³ This condition was established pursuant to Rule 336.1299 as it applied at the time of permitting in 2012. EUELECTROLESSCU was subject to a case-by-case Maximum Achievable Control Technology (MACT) review under Section 112(g) of the federal Clean Air Act 40 CFR Part 63. Rule 336.1299 has been rescinded, and the current equivalent rule is Rule 336.1902(1)(h).

**EUKPGENSET
 EMISSION UNIT CONDITIONS**

DESCRIPTION

One 190 brake horsepower, natural gas fueled, 4 stroke rich burn (4SRB), spark ignition reciprocating internal combustion engine designed to provide 125 kW of emergency electrical power.

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. NO _x	2 g/hp-hr	Hourly	EUKPGENSET	SC VI.2	40 CFR 60.4233(e) 40 CFR 63.6590(c)
2. CO	4 g/hp-hr	Hourly	EUKPGENSET	SC VI.2	40 CFR 60.4233(e) 40 CFR 63.6590(c)
3. VOC	1 g/hp-hr	Hourly	EUKPGENSET	SC VI.2	40 CFR 60.4233(e) 40 CFR 63.6590(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee may operate EUKPGENSET 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, 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 year. EUKPGENSET may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d), 40 CFR 63.6590(c))**
2. The permittee shall operate and maintain EUKPGENSET such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b), 40 CFR 63.6590(c))**
3. If the permittee purchased 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 for EUKPGENSET: **(40 CFR 60.4243(a) and (b), 40 CFR 63.6590(c))**
 - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.

- b. The permittee may only change those engine settings that are permitted by the manufacturer. If you do 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.
 - c. Meet the requirements as specified in 40 CFR Part 1068, Subparts A through D.
4. If EUKPGENSET is a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUKPGENSET and shall, to the extent practicable, maintain and operate EUKPGENSET in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 60.4243(b)(2), 40 CFR 63.6590(c))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The nameplate capacity of any engine in EUKPGENSET shall not exceed 500 bhp, as certified by the equipment manufacturer. **(40 CFR 60.4230, 40 CFR 63.6590(c)(6))**

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, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification and maintenance records documenting that EUKPGENSET demonstrates compliance with the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. **(40 CFR 60.4243(a), 40 CFR 60.4245, 40 CFR 63.6590(c))**
2. The permittee shall keep records of the following information for EUKPGENSET: **(40 CFR 60.4245(a), 40 CFR 63.6590(c))**
- a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
 - b. Maintenance conducted on EUKPGENSET.
 - c. If EUKPGENSET is a certified engine, documentation from the manufacturer that EUKPGENSET is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
 - d. If EUKPGENSET is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that EUKPGENSET meets the emission standards.
3. The permittee shall maintain a log of the hours of operation of EUKPGENSET using the non-resettable hour meter. The log shall document the reason for the operation, including how many hours are spent for emergency operation and what classified the operation as an emergency and how many hours are for non-emergency operation. **(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 REQUIREMENTS

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 any engine in EUKPGENSET. **(40 CFR Part 60, Subparts A & JJJJ)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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
FGNEUTCATACC	Neutralizer tank (sulfuric acid), two catalyst tanks (hydrochloric acid) and accelerator tank (hydrochloric acid).	EUNEUTRALIZER EUCATALYST EUACCELERATOR EUCATALYST2
FGCOPPER	One copper strike tank containing copper sulfate and sulfuric acid and six acid copper tanks containing copper sulfate, ferrous sulfate and sulfuric acid.	EUCUSTRIKE EUACIDCU
FGNICKEL	Five (5) semi brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, two (2) brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, six (6) platinum/nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid and one (1) durni (micro-porous) nickel plating tank containing nickel sulfate, nickel chloride, formaldehyde and boric acid.	EUSEMIBRNI EUBRITENI EUPLATINUM EUDURNINI
FGCHROME1	Three (3) decorative hexavalent chrome electroplating tanks with a shared composite mesh pad scrubber system and fume suppressant for control.	EUCHROME1 EUCHROME2 EUCHROME3
FGSTRIPTANKS	One chrome strip tank containing sodium hydroxide and one nitric acid strip tank. The two tanks are controlled by a common packed bed scrubber system with mist eliminators.	EUCHROMESTRIP EUNITRICSTRIP
FGBOILERS	Five (5) natural gas fired 1.8 MMBTU/hr boilers also subject to the Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EUBOILER1 EUBOILER2 EUBOILER3 EUBOILER4 EUBOILER5

FGNEUTCATACC FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Neutralizer tank (sulfuric acid), two catalyst tanks (hydrochloric acid) and accelerator tank (hydrochloric acid).

Emission Units: EUNEUTRALIZER, EUCATALYST, EUACCELERATOR, EUCATALYST2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGNEUTCATACC unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGNEUTCATACC, is implemented and maintained. 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 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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. SVK3	48 ²	85 ²	R 336.1225 40 CFR 52.21(c)&(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).

FGCOPPER FLEXIBLE GROUP CONDITIONS

DESCRIPTION

One copper strike tank containing copper sulfate and sulfuric acid and six acid copper tanks containing copper sulfate, ferrous sulfate and sulfuric acid.

Emission Units: EUACIDCU, EUCUSTRIKE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGCOPPER unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGCOPPER, is implemented and maintained. 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 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

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

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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. SVK5	60 ¹	85 ¹	R 336.1225, R 336.1901

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).

**FGNICKEL
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Five (5) semi brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, two (2) brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, six (6) platinum/nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid and one (1) durni (micro-porous) nickel plating tank containing nickel sulfate, nickel chloride, formaldehyde and boric acid.

Emission Units: EUSEMIBRNI, EUBRITENI, EUPLATINUM, EUDURNINI

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nickel	0.19 lb/hr ¹	Hourly	EUSEMIBRNI	SC V.I	R 336.1225
2. Formaldehyde	0.04 lb/hr ²	Hourly	EUSEMIBRNI	SC V.I	R 336.1225 R 336.1702(a)
3. Nickel	0.27 lb/hr ¹	Hourly	EUBRITENI, EUPLATINUM and EUDURNINI combined	SC V.I	R 336.1225
4. Formaldehyde	0.04 lb/hr ²	Hourly	EUBRITENI, EUPLATINUM and EUDURNINI combined	SC V.I	R 336.1225 R 336.1702(a)
5. Sodium Hydroxide	0.33 lb/hr ¹	Hourly	EUBRITENI, EUPLATINUM and EUDURNINI combined	SC V.I	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGNICKEL unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGNICKEL, is implemented and maintained. 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)

NA

V. TESTING/SAMPLING

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

1. Every 48 months from the date of completion of the most recent stack test, the permittee shall verify the hourly formaldehyde, methanol and sodium hydroxide emission rates from FGNICHEL 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. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
Formaldehyde	40 CFR, Part 60, Appendix A
Nickel	40 CFR, Part 60, Appendix A
Sodium Hydroxide	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 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, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit 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 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform and record the inspections of the fan and ventilation system for FGNICHEL as required by the malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) identified in SC III.1. **(R 336.1213(3))**
2. The permittee shall keep a record of the most recent stack test emissions data to demonstrate compliance with the emission limits. This record shall be made available for review 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 RESTRICTIONS

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. SVK6	52 ¹	85 ¹	R 336.1225, R 336.1901
2. SVK7	52 ¹	85 ¹	R 336.1225, R 336.1901

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).

**FGCHROME1
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Three (3) decorative hexavalent chrome electroplating tanks with a shared composite mesh pad scrubber system and fume suppressant for control.

Emission Units: EUCHROME1, EUCHROME2, EUCHROME3

POLLUTION CONTROL EQUIPMENT

A shared composite mesh pad scrubber system and fume suppressant for control.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total Chromium	0.006 mg/dscm ^{a2}	Hourly	FGCHROME1	SC V.1, VI.1, VI.2, VI.5	R 336.1225 R 336.1901 40 CFR Part 63, Subparts A & N
2. Total Chromium	0.003 pph ¹	Hourly	FGCHROME1	SC V.1, VI.1, VI.2, VI.5	R 336.1225 R 336.1901

^a corrected to 70°F and 29.92 inches Hg

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGCHROME1 unless an approved operation and maintenance plan (O&M Plan) is implemented which contains all information required by 40 CFR 63.342(f)(3)(i), including the following:² **(R 336.1225, R 336.1901, 40 CFR Part 63, Subparts A & N)**
 - a. Operation and maintenance criteria for FGCHROME1, add-on control device(s), and for the process and control device(s) monitoring equipment as well as a standardized checklist to document the operation and maintenance of the equipment.
 - b. The work practice standards for the add-on control device(s) and monitoring equipment.
 - c. Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
 - d. A systematic procedure for identifying process equipment, add-on control device(s) and monitoring equipment malfunctions and for implementing corrective actions to address such malfunctions.
2. The permittee shall not operate any tank in FGCHROME1 unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of each tank does not exceed, at any time during operation, 45 dynes/cm (3.1x10⁻³ pound-force per foot) as measured by a tensiometer. An alternate surface tension may be developed based on stack testing results as long as the stack test was performed using methods, plans and procedures approved by the AQD District Supervisor prior to testing.² **(R 336.1225, R 336.1901, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any tank in FGCHROME1 unless the composite mesh pad system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the composite mesh pad system includes, but is not limited to, maintaining the pressure drop and a minimum water flow rate (in gallons per minute) into the system based on the specifications in the operation and maintenance plan, as required by SC III.1.² **(R 336.1225, R 336.1901, 40 CFR Part 63, Subparts A & N)**
2. The permittee shall equip and maintain the composite mesh pad system with a differential pressure monitoring device.² **(R 336.1225, R 336.1901, R 336.1910, 40 CFR 63.343(c))**
3. The permittee shall equip and maintain the composite mesh pad system with a device to monitor the water flow across each stage of the composite mesh pad system during wash down cycles.² **(R 336.1225, R 336.1901, R 336.1910)**

V. TESTING/SAMPLING

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

1. Every 24 months from the date of completion of the most recent stack test, the permittee shall verify the hourly total chromium emission rates from FGCHROME1, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. The permittee shall notify the AQD District Supervisor in writing of the intention to conduct a performance test, at least 60 calendar days before the test is scheduled to begin, in accordance with 40 CFR 63.347(d). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 63, Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. 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 within 90 days following the last date of the test.² **(R 336.1225, R 336.1901, R 336.2001, R 336.2002, R 336.2003, 40 CFR Part 63, Subparts A & N, R 336.1213(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor the surface tension of each tank in FGCHROME1 once every four (4) hours of tank operation for the first 40 hours of tank operation. If there are no exceedances during the first 40 hours of tank operation, then surface tension measurements may be conducted once every eight (8) hours of tank operation for the next 40 hours of tank operation. If there are no exceedances during the 40 hours of tank operation when surface tension measurements are being conducted every eight (8) hours, then surface tension measurements may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every four (4) hours must be resumed and the subsequent decrease in frequency shall follow the schedule as laid out above. The minimum frequency of monitoring allowed is once every 40 hours of tank operation. An example of monitoring frequency is available at 40 CFR 63.343(c)(5)(ii)(C). The surface tension shall be monitored with a tensiometer as specified in Method 306B of 40 CFR Part 63, Subpart N.² **(R 336.1225, R 336.1901, R 336.1910)**
2. The permittee shall perform inspections of the composite mesh pad (CMP) system as follows:² **(R 336.1225, R 336.1901, R 336.1910, 40 CFR 63.342(f), 40 CFR 63.343(c)(1))**
 - a. Determine pressure drop across the CMP system once each day that the associated tanks are operating. If the pressure drop across the control varies by more than ± 2 inch of water gauge, from the pressure drop

determined during compliance testing, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.

- b. Visually inspect the CMP system, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on the pads, and no evidence of chemical attack on the structural integrity of the control device.
 - c. Visually inspect the back portion of the mesh pad closest to the fan, on a quarterly basis, to ensure there is no breakthrough of chromic acid mist.
 - d. Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there are no leaks.
 - e. Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations. The permittee shall monitor the water flow during the wash down cycles for each stage on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the operation and maintenance plan, as required by SC III.1.
3. The permittee shall monitor emissions and operating and maintenance information in accordance with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and N. The permittee shall keep records of all source emissions and operating and maintenance information on file at the facility and make them available to the Department upon request.² **(40 CFR Part 63, Subparts A & N)**
 4. The permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection. The permittee shall also record any actions taken to correct the deficiencies found during the inspection. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1225, R 336.1901, R 336.1910, 40 CFR Part 63, Subparts A & N)**
 5. The permittee shall keep records of the surface tension of each tank in FGCHROME1, the amount of chemical fume suppressant added to each tank in FGCHROME1 and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request.¹ **(R 336.1225, R 336.1901)**

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 RESTRICTIONS

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. SVK8	52 ¹	85 ¹	R 336.1225, R 336.1901

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).

**FGSTRIPTANKS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

One chrome strip tank containing sodium hydroxide and one nitric acid strip tank. The two tanks are controlled by a common packed bed scrubber system with mist eliminators.

Emission Units: EUCHROMESTRIP, EUNITRICSTRIP

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber system with mist eliminators.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitric Acid	1.9 lb/hr ¹	Hourly	EUNITRICSTRIP	SC V.1, VI.1, VI.2	R 336.1225
2. Sodium Hydroxide	0.4 lb/hr ¹	Hourly	EUCHROMESTRIP	SC V.1, VI.1, VI.2	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGSTRIPTANKS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 336.1910, R 336.1911**)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FGSTRIPTANKS unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.² (**R 336.1224, R 336.1225, R 336.1901, R 336.1910**)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for FGSTRIPTANKS on a continuous basis.² (**R 336.1224, R 336.1225, R 336.1901, R 336.1910**)

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for FGSTRIPTANKS on a continuous basis.² **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

V. TESTING/SAMPLING

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

1. Every 5 years from the date of the last test, the permittee shall verify the hourly nitric acid and sodium hydroxide emission rates from FGSTRIPTANKS by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. 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 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004 R 336.1213(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform inspections of the packed bed scrubber system for FGSTRIPTANKS as follows:² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
 - a. Determine pressure drop across the packed bed scrubber once each day that any of the associated tanks are operated. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
 - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
 - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system for FGSTRIPTANKS on file and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

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 RESTRICTIONS

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. SVK9	54 ¹	60 ¹	R 336.1225, R 336.1901

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).

FGBOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five (5) natural gas fired 1.8 MMBTU/hr boilers also subject to the Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

Emission Units: EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUBOILER5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. **(40 CFR 63.7500(a))**
 - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
 - b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
2. As provided in 40 CFR 63.6(g), USEPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. Boilers and process heaters in the units designed to burn gas 1 fuel subcategory with a heat input capacity: **(40 CFR 63.7500(e))**
 - a. Of less than or equal to 5 MMBTU per hour must complete a tune-up every 5-years as specified in 40 CFR 63.7540, stated in SC IX.8. **(40 CFR 63.7500(e))**
 - b. Greater than 5 MMBTU per hour and less than 10 MMBTU per hour must complete a tune-up every 2-years as specified in 40 CFR 63.7540, stated in SC IX.8. **(40 CFR 63.7500(e))**
4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7515(d), stated in SC III.5, following the initial compliance date specified in 40 CFR 63.7495(a), stated

in SC IX.3. Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 CFR 63.7515(d), stated in SC III.5. **(40 CFR 63.7510(g))**

5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
 - a. Conduct the first annual tune-up no later than 13-months after the initial startup of the new or reconstructed boiler or process heater, the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater, or the first 5-year tune-up no later than 61-months after the initial startup of the new or reconstructed boiler or process heater.
 - b. Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.8.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.c. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13-months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61-months after the previous tune-up. **(40 CFR 63.7515(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The boiler or process heater shall have a heat input capacity of less than 10 MMBTU per hour. **(40 CFR Part 63, Subpart DDDDD)**

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 must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
 - a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60 or Parts 61, Part 63, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. **(40 CFR 63.7555(h))**
3. 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 63.7560(a))**
4. 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 63.7560(b))**

5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3-years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.6 through SC VII.11, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
5. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.12. **(40 CFR 63.7540(b))**
6. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
7. As specified in 40 CFR 63.9(b)(2), if the permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. **(40 CFR 63.7545(b))**
8. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee must submit an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
9. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**
 - a. Company name and address. **(40 CFR 63.7545(f)(1))**
 - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**

10. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: **(40 CFR 63.7545(g))**
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.7545(g)(1))**
 - b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(g)(2))**
 - c. The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.7545(g)(3))**
 - d. The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.7545(g)(4))**
11. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30-days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
 - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
12. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
13. Unless the USEPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.15, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.8.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semiannual compliance report. **(40 CFR 63.7550(b))**
 - a. The first semiannual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3, and ending on December 31 after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1, 2, or 5-years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
 - b. The first semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
 - c. Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1, 2, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d. Each subsequent semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting

period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**

14. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
 - a. If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
 - b. 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - iv. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
15. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
 - a. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the USEPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER1	6 ²	40 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVBOILER2	6 ²	40 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVBOILER3	6 ²	40 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SVBOILER4	6 ²	40 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
5. SVBOILER5	6 ²	40 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. 40 CFR Part 63, Subpart DDDDD applies to new or reconstructed affected sources as described in paragraph (a)(2) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
 - a. The affected source of 40 CFR Part 63, Subpart DDDDD is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in 40 CFR 63.7575, located at a major source. **(40 CFR 63.7490(a)(2))**
2. A boiler or process heater is:
 - a. New if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
 - b. Reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
3. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD by April 1, 2013, or upon startup of each boiler or process heater, whichever is later. **(40 CFR 63.7495(a))**
4. If the permittee has an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraph (c)(2) of 40 CFR 63.7495, as listed below, applies to the permittee. **(40 CFR 63.7495(c))**
 - a. Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup. **(40 CFR 63.7495(c)(1))**
5. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
6. For affected sources, as defined in 40 CFR 63.7490, that switch subcategory consistent with 40 CFR 63.7545(h), stated in SC VII.11, after the initial compliance date, the permittee must demonstrate compliance within 60 days of the effective date of the switch, unless the compliance demonstration for this subcategory has been conducted within the previous 12 months. **(40 CFR 63.7510(k))**
7. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.8.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.8.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
8. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
 - a. If the boiler or process heater has a heat input capacity of 10 MMBTU per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified

in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. The tune-up must be conducted while burning the type of fuel or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12-months prior to the tune-up. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36-months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36-months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - (1) The concentrations of CO in the effluent stream in ppm by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - (2) A description of any corrective actions taken as a part of the tune-up. **40 CFR 63.7540(a)(10)(vi)(B))**
 - (3) The type and amount of fuel used over the 12-months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
- b. If the boiler or process heater has a heat input capacity of less than 10 MMBTU per hour (except as specified in paragraph (a)(12) of 40 CFR 63.7540), the permittee must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. **(40 CFR 63.7540(a)(11))**
- c. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 MMBTU per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5-years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72-months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5-years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. **(40 CFR 63.7540(a)(12))**
- d. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30-calendar days of startup. **(40 CFR 63.7540(a)(13))**

9. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		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

The permittee shall use the following federal Reference Test Methods to measure the pollutant emissions for the applicable requirements referenced in EUELECTROLESSCU, EUCONDITIONER, EUCHROMEETCH, FGCHROME1, FGNICKEL, FGSTRIPTANKS. Any alternatives to the following test methods shall be approved by the Air Quality Division or the USEPA where applicable.

1. Formaldehyde – 40 CFR Part 60, Appendix A, Reference Method 316
2. Total Chromium – 40 CFR Part 60, Appendix A, Reference Method 29
3. Hexavalent Chromium – 40 CFR Part 60, Appendix A, Reference Method 306
4. Nickel – 40 CFR Part 60, Appendix A, Reference Method 29
5. 1,3 Dichloro-2-propanol - 40 CFR Part 60, Appendix A, Reference Method 18
6. Nitric Acid – 40 CFR Part 60, Appendix A, Method 308
7. Methanol – 40 CFR Part 63, Appendix A
8. Sodium Hydroxide – 40 CFR Part 60, Appendix A

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-N7374-2015. 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-N7374-2015a is being reissued as Source-Wide PTI No. MI-PTI-N7374-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
151-17	MI-ROP-N7374-2015a	Installation of EUCATALYST2 which is an additional catalyst tank.	FGNEUTCATACC
192-19	NA	Installation of EUPREETCHTANK which is one (1) tank used to pre-etch plastic parts prior to plating.	EUPREETCHTANK

Appendix 7. Emission Calculations

There are no specific emission calculations to be used for this ROP. 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.