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

EFFECTIVE DATE: January 17, 2018 REVISION DATE: September 27, 2019

ISSUED TO

Lacks Enterprises, Inc.

State Registration Number (SRN): N0895

LOCATED AT

4260 Airlane Road SE, Kentwood, Kent County, Michigan 49512

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N0895-2018a

Expiration Date: January 17, 2023

Administratively Complete ROP Renewal Application Due Between July 17, 2021 and July 17, 2022

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N0895-2018a

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

Michigan Department of Environment, Great Lakes, and Energy

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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 are 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.

ROP No: MI-ROP-N0895-2018a Expiration Date: January 17, 2023

PTI No: MI-PTI-N0895-2018a

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

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**

- a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
- 23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
- 24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. (R 336.1212(6))
- 25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.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(8))

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):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. 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 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
EUPN-1	This emission group consists of four semi-bright nickel tanks. Stack ID SVN-1A.	8-27-1998	FGN-1
EUPN-2	This emission group consists of three bright nickel tanks. Stack ID SVN-1B.	8-27-1998	FGN-1
EUPN-3	This emission group consists of one microporous nickel and one chrome pre-dip tank. Stack ID SVN-1B.	8-27-1998	FGN-1
EUPN-4	This emission group consists of four copperacid tanks. Stack ID SVN-3.	8-27-1998	FGN-1
EUPN-5	This emission group consists of one copper-strike tank. Stack ID SVN-3.	8-27-1998	FGN-1
EUPN-6	This emission group consists of one electroless copper/electroless nickel tank controlled by a packed bed scrubber with mist eliminator. Stack ID SVN-4	8-27-1998	FGN-1
EUPN-7	This emission group consists of one accelerator tank. Stack ID SVN-5.	8-27-1998	FGN-1
EUPN-8	This emission group consists of one catalyst tank. Stack ID SVN-5.	8-27-1998	FGN-1
EUPN-9	This emission group consists of one neutralizer tank. Stack ID SVN-5.	8-27-1998	FGN-1
EUPN-10	This emission group consists of three chrome etch tanks, one etch regeneration unit and one evaporator/reclaim unit controlled by a composite mesh pad scrubber. Stack ID SVN-6.	8-27-1998	FGN-1
EUPN-11	This emission group consists of one conditioner tank. Stack ID SVN-7.	8-27-1998	FGN-1
EUPN-12	This emission group consists of three chrome plate tanks and one purification tank and one evaporator/reclaim unit controlled by a composite mesh pad. Stack ID SVN-2.	8-27-1998	FGN-1 FGNESHAPN
EUPN-13	This emission group consists of one chrome strip tank and one nitric strip tank controlled by a packed bed scrubber with mist eliminator. Stack ID SVN-8.	8-27-1998	FGN-1

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPN-14	This emission unit consists of one pre-etch tank. Stack ID SVN-7.	06-19-2019	FGN-1
EUPS-1	This emission group consists of five copperacid tanks. Stack ID SVS-P12.	2-12-1985	FGS-1
EUPS-2	This emission group consists of one copper- strike tanks. Stack ID SVS-P18.	2-12-1985	FGS-1
EUPS-3	This emission group consists of one electroless copper/electroless nickel tank controlled by a packed bed scrubber. Stack ID SVS-P13.	2-12-1985/ 10-6-2017	FGS-1
EUPS-4	This emission group consists of one accelerator tank. Stack ID SVS-P14.	2-12-1985	FGS-1
EUPS-5	This emission group consists of three chrome etch tanks controlled by a composite mesh pad. Stack ID SVS-P11.	2-12-1985	FGS-1
EUPS-6	This emission group consists of one conditioner tank controlled by a packed bed scrubber. Stack ID SVS-P15.	2-12-1985\ 9-15-2003	FGS-1
EUPS-7	This emission group consists of three chrome plate tanks, one purification tank and one evaporator/reclaim unit controlled by a composite mesh pad. Stack ID SVS-P10.	2-12-1985	FGS-1 FGNESHAPN
EUCHROME4	One decorative chrome electroplating tank with fume suppressant and three stage composite mesh pad scrubber. Stack ID SVCR4.	8-12-2011	FGNESHAPN
EUPS-8	This emission group consists of one nitric strip tank controlled by a packed bed scrubber. Stack ID SVS-P16.	2-12-1985	FGS-1
EUPS-9	This emission group consists of one chrome strip tank. Stack ID SVS-P17.	2-12-1985	FGS-1
EUPS-10	This emission group consists of two bright nickel tanks, five semi-bright nickel tanks, one micro porous nickel tank and one micro crack nickel tank. Stack ID SVS-P19.	2-12-1985/ 10-6-2017	FGS-1
EUCOLDCLEANERS	This emission group consists of miscellaneous cold cleaners installed after 1979.	NA	FGCOLDCLEANERS
EUALNWGENSET	One 40 BHP, natural gas fueled, 4 stroke rich burn engine designed to provide 20kW of emergency standby electrical power.	2001	FGEMERGENCYRICE- SI
EUBOILER1-S	2.676 MMBtu/hr natural gas-fired boiler.	2-12-1985	FGBOILERS
EUBOILER2-S	4.18 MMBtu/hr natural gas-fired boiler.	2-12-1985	FGBOILERS
EUBOILER1-N	5.25 MMBtu/hr natural gas-fired boiler.	8-27-1998	FGBOILERS
EUBOILER2-N	5.25 MMBtu/hr natural gas-fired boiler.	8-27-1998	FGBOILERS

EUCHROME4

DESCRIPTION

One decorative chrome electroplating tank with fume suppressant and three stage composite mesh pad scrubber system for control located at Airlane South.

EMISSION UNIT CONDITIONS

Flexible Group ID: FGNESHAPN

POLLUTION CONTROL EQUIPMENT

Fume suppressant and three stage composite mesh pad scrubber system

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Total chromium	0.01 mg/dscm ¹	Continuous	EUCHROME4	SC V.2 & VI.1 through VI.5	R 336.1225 R 336.1901
2.	Total chromium	0.0005 pph ¹	Hourly	EUCHROME4	SC V.2 & VI.1 through VI.5	R 336.1225 R 336.1901

3. The affected source shall be in compliance with the applicable emission limits in 40 CFR 63.342 during tank operation and during periods of startup and shutdown.² (40 CFR 63.342(b)(1))

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan.² (40 CFR 63.342(f)(1)(i))
- 2. The permittee shall implement an approved Operation and Maintenance plan. The plan shall contain all information required by 40 CFR 63.342(f)(3)(i), which includes the following:² (R 336.1225, R 336.1901, 40 CFR Part 63, Subparts A & N)
 - a. Operation and maintenance criteria for EUCHROME4, 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; and
 - 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.

3. The permittee shall not operate EUCHROME4 unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of the tank does not exceed, at any time during operation, 45 dynes/cm (3.1x10-3 pound-force per foot) as measured by a tensiometer.² (R 336.1225, R 336.1901, R 336.1910)

- 4. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. If the plan is revised, the permittee shall keep previous versions of the plan available upon request, for a period of 5 years after each revision to the plan.² (40 CFR 63.342(f)(3)(ii) and (v))
- 5. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event.² (40 CFR 63.342(f)(3)(iv))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate EUCHROME4 unless the composite mesh pad system is installed, maintained, and operated in a satisfactory manner.² (R 336.1225, R 336.1910, 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))

V. TESTING/SAMPLING

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

- 1. Except as provided in 40 CFR 63.343(b)(2) and (3), the permittee shall conduct an initial performance test as required by 40 CFR 63.7, using the test methods identified in 40 CFR 63.344(c), and shall establish site-specific operating parameters that correspond to compliance with the applicable emission limitation.² (40 CFR 63.343(b) & (c))
- 2. Within every 24 months from the date of completion of the most recent stack test thereafter, the permittee shall verify total chromium emission rates from EUCHROME4, by testing at owner's expense, in accordance with 40 CFR Part 63, Subparts A and N. 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)

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 EUCHROME4 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 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. The surface tension shall be monitored with a tensiometer.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 Part 63.342(f), 40 CFR 63.343(c)(1)or(3))
 - a. Determine pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than ± 2 inches 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.
- 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.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.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 EUCHROME4, the amount of chemical fume suppressant added to EUCHROME4 and the date and time of each addition.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 notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal.¹ (R 336.1225(4))
- 5. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing.² (R 336.2001(3))
- 6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date.² (R 336.2001(4))
- 7. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test.² (R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCR4	40 ¹	61 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).

D. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGN-1	North Plater - electroplating of copper, nickel and decorative chrome on plastic parts.	EUPN-1, EUPN-2, EUPN-3, EUPN-4, EUPN-5, EUPN-6, EUPN-7, EUPN-8, EUPN-9, EUPN-10, EUPN-11, EUPN-12, EUPN-13, EUPN-14
FGS-1	South Plater - electroplating of copper, nickel and decorative chrome on plastic parts.	EUPS-1, EUPS-2, EUPS-3, EUPS-4, EUPS-5, EUPS-6, EUPS-7, EUPS-8, EUPS-9 EUPS-10
FGNESHAPN	Each existing chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing as defined in 40 CFR Part 63, Subpart N, 40 CFR 63.341. Affected sources include equipment covered by other permits, grandfathered equipment, and exempt equipment.	EUPN-12, EUPS-7, EUCHROME4
FGEMERGENCYRICE-SI	Existing emergency spark ignition engines < 500 HP, located at a major source, that commenced construction or reconstruction before June 12, 2006.	EUALNWGENSET
FGBOILERS	Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EUBOILER1-S, EUBOILER2-S, EUBOILER1-N, EUBOILER2-N
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANERS

FGN-1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

North Plater - electroplating of copper, nickel and decorative chrome on plastic parts.

Emission Units: EUPN-1, EUPN-2, EUPN-3, EUPN-4, EUPN-5, EUPN-6, EUPN-7, EUPN-8, EUPN-9, EUPN-10,

EUPN-11, EUPN-12, EUPN-13, EUPN-14

POLLUTION CONTROL EQUIPMENT

Two packed bed scrubbers with mist eliminators, fume suppressant and two composite mesh pad systems.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable
						Requirements
1.	Total nickel	0.0598 pph ¹	Hourly	EUPN-1, EUPN-2,	SC IV.2 & V.1	R 336.1224
				EUPN-3, EUPN-6		R 336.1225
2.	Total	0.00037 pph ¹	Hourly	EUPN-10	SC IV.1 & V.2	R 336.1224
	chromium		-			R 336.1225
3.	Total	0.00043 pph ¹	Hourly	EUPN-12	SC IV.1 & V.2	R 336.1224
	chromium		,			R 336.1225
4.	Formaldehyde	2.72 pph ¹	Hourly	EUPN-6	SC V.1	R 336.1224
	,	''	,			R 336.1225
5.	Methanol	8.25 pph ¹	Hourly	EUPN-6	SC V.1	R 336.1224
						R 336.1225
6.	Ammonia	0.132 pph ¹	Hourly	EUPN-6	SC III.5	R 336.1224
						R 336.1225
7.	1,3-dichloro-2-	0.84 pph ¹	Hourly	EUPN-11	SC V.1	R 336.1224
	propanol		,			R 336.1225
8.	Nitric acid	1.23 pph ¹	Hourly	EUPN-13	SC III.4 & IV.2	R 336.1224
		0 pp				R 336.1225
9.	VOC	540 lbs per	12-month rolling time	EUPN-14	SC VI.3 & VI.4	R 336.1702(a)
		year ²	period as determined			11 000111 02(0.)
		y = 2	at the end of each			
			calendar month			
10	Opacity	0% except for		All process tanks	SC V.3 & VI.2	R 336.1331(1)(c)
10.	Opaoity	uncombined	14/1	7 iii proocco tariko	00 v.0 a vi.2	R 336.1301
		water vapor ²				13 330.1301
		water vapor -				

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the three chromium etch tanks from EUPN-10 unless a chemical fume suppressant with a wetting agent and/or composite mesh pad scrubber is used, installed and operating properly.² (R 336.1224, R 336.1910)

2. The permittee shall not operate the electroless copper and/or electroless nickel tanks from EUPN-6 unless the packed bed scrubber with a mist eliminator is installed, maintained and operating in a satisfactory manner.² (R 336.1224, R 336.1910)

- 3. The permittee shall not operate the three decorative chromium plating tanks and a chromium purification tank from EUPN-12 unless a chemical fume suppressant with a wetting agent is present in the three decorative chromium plating tanks in combination with a composite mesh pad scrubber installed and operating properly.² (R 336.1224, R 336.1910)
- 4. The permittee shall not operate the chromium and nitric acid strip tanks EUPN-13 unless the packed bed scrubber with a mist eliminator is installed, maintained and operating in a satisfactory manner.² (R 336.1224, R 336.1910)
- 5. The permittee shall implement an approved Operation and Maintenance Plan/Malfunction Abatement Plan.² (R 336.1911, 40 CFR 63.342(f)(3)i))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. Each composite mesh pad system on EUPN-10 and EUPN-12 shall be equipped with a differential pressure monitoring device.² (R 336.1224, R 336.225, R 336.901, R 336.1910)
- 2. Each packed bed scrubber with mist eliminator on EUPN-6 and EUPN-13 shall be equipped with a liquid flow monitoring device.² (R 336.1224, R 336.225, R 336.901, 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. Within every 48 months from the date of completion of the most recent stack test thereafter, the permittee shall verify formaldehyde, methanol, nickel and 1,3 dichloro-2-propanol emission rates from FGN-1 by testing at owner's expense, in accordance with Department requirements and applicable federal Reference Methods found in Appendix 5. 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 60 days following the last date of the test.² (R 336.2001, R 336.2003, R 336.2004)
- 2. Within every 24 months from the date of completion of the most recent stack test thereafter, the permittee shall verify chromium emission rates from FGN-1 by testing at owner's expense, in accordance with Department requirements and applicable federal Reference Methods found in Appendix 5. 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 60 days following the last date of the test.² (R 336.2001, R 336.2003, R 336.2004, R 336.1941, 40 CFR 63.344, 40 CFR 63.347(f))
- 3. The permittee shall perform weekly non-certified visual observations during operation.² (R 336.1301, R 336.1331(c))

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 conduct monitoring and maintain records of actions taken as outlined in and pursuant to the approved Operation and Maintenance Plan/Malfunction Abatement Plan.² (40 CFR 63.346, R 336.1911)
- 2. The permittee shall maintain records of the weekly non-certified visual opacity observation performed to determine compliance with applicable opacity limitations.² (R 336.1301, R 336.1331(1)(c))

3. The permittee shall keep a record, in a manner acceptable to the AQD District Supervisor, of the composition of all additives used in EUPN-14 and of the maximum concentration in the tank of all components of the additives that are VOCs.² (R 336.1702(a))

4. The permittee shall calculate the VOC emission rate from EUPN-14 monthly 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. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing.² (R 336.2001(3))
- 5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date.² (R 336.2001(4))
- 6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test.² (R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVN-1A	60 ¹	60 ¹	R 336.1225
2. SVN-1B	40 ¹	60 ¹	R 336.1225
3. SVN-2	50 ¹	60 ¹	R 336.1225
4. SVN-3	52 ¹	60 ¹	R 336.1225
5. SVN-4	32 ¹	60 ¹	R 336.1225
6. SVN-5	42 ¹	60 ¹	R 336.1225
7. SVN-6	46¹	60 ¹	R 336.1225
8. SVN-7	18 ²	80 ²	R 336.1225 40 CFR 52.21(c)&(d)
9. SVN-8	40 ¹	60 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The notification shall be submitted to the District Supervisor, Air Quality Division, within 30 days of the actual land use change. Within 60 days of the land use change, the applicant shall submit to the District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) not later than one year after the due date of the plan submittal.¹ (R 336.1225(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).

FGS-1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

South Plater - electroplating of copper, nickel and decorative chrome on plastic parts.

Emission Units: EUPS-1, EUPS-2, EUPS-3, EUPS-4, EUPS-5, EUPS-6, EUPS-7, EUPS-8, EUPS-9, EUPS-10

POLLUTION CONTROL EQUIPMENT

Three packed bed scrubbers, Fume suppressant, Two composite mesh pad systems.

I. <u>EMISSION LIMIT(S)</u>

	Pollutant	Limit	Time Period/ Operating	Equipment	Monitoring/	Underlying
			Scenario		Testing	Applicable
					Method	Requirements
1.	Total nickel	0.0063 pph ¹	Hourly	EUPS-10	SC V.1	R 336.1224
			-			R 336.1225
2.	Total	0.000542 pph ¹	Hourly	EUPS-5	SC III.1, IV.1 &	R 336.1224
	chromium		-		V.2	R 336.1225
3.	Total	0.000489 pph1	Hourly	EUPS-7	SC III.3, IV.1 &	R 336.1224
	chromium		,		V.2	R 336.1225
4.	Formaldehyde	0.6458 pph ¹	Hourly	EUPS-3	SC V.1	R 336.1224
	•		,			R 336.1225
5.	Methanol	9.12 pph ¹	Hourly	EUPS-3	SC V.1	R 336.1224
			,			R 336.1225
6.	Ammonia	0.145 pph ¹	Hourly	EUPS-3	SC III.5	R 336.1224
			,			R 336.1225
7.	1,3-dichloro-2-	0.84 pph ¹	Hourly	EUPS-6	SC III.6, IV.2 &	R 336.1224
	propanol		-		V.1	R 336.1225
8.	Nitric acid	0.11 pph ¹	Hourly	EUPS-8	SC IV.2 & V.3	R 336.1224
			,			R 336.1225
9.	Opacity	0%, except for	NA	All process tanks	SC V.3	R 336.1331(1)(c)
		uncombined				R 336.1301
		water vapor ²				

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate the three chromium etch tanks from EUPS-5 unless a chemical fume suppressant with a wetting agent and/or composite mesh pad scrubber is used, installed and operating properly.² (R 336.1224, R 336.1910)
- 2. The permittee shall not operate the electroless copper and/or electroless nickel tanks from EUPS-3 unless the packed bed scrubber is installed and operating properly.² (R 336.1224, R 336.1910)

3. The permittee shall not operate the three decorative chromium plating tanks and a chromium purification tank from EUPS-7 unless a chemical fume suppressant with a wetting agent is present in the three decorative chromium plating tanks in combination with a composite mesh pad scrubber that is installed and operating properly.² (R 336.1224, R 336.1910, 40 CFR 63.342)

- 4. The permittee shall not operate the nitric acid strip tanks EUPS-8 unless the packed bed scrubber with a mist eliminator is installed and operating properly.² (R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 5. The permittee shall implement the approved Operation and Maintenance Plan/Malfunction Abatement Plan.² (R 336.1911, 40 CFR 63.342)
- 6. The permittee shall not operate the conditioner tank EUPS-6 unless the packed bed scrubber with a mist eliminator is installed and operating properly.² (R 336.1224, R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. Each composite mesh pad system on EUPS-5 and EUPS-7 shall be equipped with a differential pressure monitoring device.² (R 336.1224, R 336.1225, R 336.1901, R 336.1910)
- 2. Each packed bed scrubber on EUPS-3, EUPS-6 and EUPS-8 shall be equipped with a liquid flow monitoring device. (R 336.1213(3))

V. TESTING/SAMPLING

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

- 1. Within every 48 months from the date of completion of the most recent stack test thereafter, the permittee shall verify formaldehyde, methanol, nickel and 1,3 dichloro-2-propanol emission rates from FGS-1 by testing at owner's expense, in accordance with Department requirements and applicable federal Reference Methods found in Appendix 5. 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 60 days following the last date of the test.² (R 336.2001, R 336.2003, R 336.2004)
- 2. Within every 24 months from the date of completion of the most recent stack test thereafter, the permittee shall verify chromium emission rates from FGS-1 by testing at owner's expense, in accordance with Department requirements and applicable federal Reference Methods found in Appendix 5. 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 60 days following the last date of the test.² (R 336.2001, R 336.2003, R 336.2004 R 336.1941, 40 CFR 63.344, 40 CFR 63.347(f))
- 3. Upon the request of the AQD District Supervisor, the permittee shall verify nitric acid emission rates from FGS-1 by testing at the owner's expense, in accordance with Department requirements and applicable federal Reference Methods found in Appendix 5. 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 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)
- 4. The permittee shall perform weekly non-certified visual observations during operation. (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 conduct monitoring and maintain records of actions taken as outlined in and pursuant to the approved Operation and Maintenance Plan/Malfunction Abatement Plan. (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 two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing.² (R 336.12001(3)
- 5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date.² (R 336.2001(4))
- 6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test.² (R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVS-P10	40 ¹	48.6 ¹	R 336.1225
2. SVS-P11	41 ¹	51.1 ¹	R 336.1225
3. SVS-P12	37 equivalent1	41.4 ¹	R 336.1225
4. SVS-P13	41 ¹	46.3 ¹	R 336.1225
5. SVS-P14	39 equivalent1	40.5 ¹	R 336.1225
6. SVS-P15	10 ¹	70¹	R 336.1225
7. SVS-P16	30.5 ¹	45.2 ¹	R 336.1225
8. SVS-P17	24 equivalent1	40.5 ¹	R 336.1225
9. SVS-P18	50 equivalent1	42.1 ¹	R 336.1225
10. SVS-P19	51.6 ¹	60 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

- <u>Footnotes</u>:

 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).

FGNESHAPN FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Each existing chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing as defined in 40 CFR Part 63, Subpart N 40 CFR 63.341. Affected sources include equipment covered by other permits, grandfathered equipment, and exempt equipment.

Emission Units: EUPN-12, EUPS-7, EUCHROME4

POLLUTION CONTROL EQUIPMENT

Composite mesh pad scrubber.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/	Equipment	Monitoring/	Underlying Applicable
		Operating Scenario		Testing Method	Requirements
1. Hexavalent	0.007	Continuous	Each Decorative	SC V.2 & VI.1	40 CFR 63.342(d)(1)
Chromium	milligram per		Chrome	through VI.3	
	dry standard		Electroplating		
	cubic meter.		Tank(s)		
	corrected to				
	70°F and				
	29.92 inches				
	Hg				

- 2. The affected source shall be in compliance with the applicable emission limits in 40 CFR 63.342 during tank operation and during periods of startup and shutdown. (R 336.1941, 40 CFR 63.342(b)(1))
- 3. The permittee shall comply with the emission limitations in 40 CFR 63.342 according to the compliance dates specified in 40 CFR 63.343(a). (R 336.1941, 40 CFR 63.343(c))

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUPN-12, EU-PS-7 or EUCHROME4 unless the composite mesh pad systems are installed, maintained, and operated in a satisfactory manner. (R 336.1941, 40 CFR 63.342(f))
- 2. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Preventative Maintenance/Operational Maintenance/Malfunction Abatement Plan. (R 336.1941, 40 CFR 63.342(f)(1)(i))
- 3. Malfunctions shall be corrected as soon as practical after their occurrence in accordance with the Preventative Maintenance/Operational Maintenance/Malfunction Abatement Plan. (R 336.1941, 40 CFR 63.342(f)(1)(ii))

4. The permittee shall implement an approved Operation and Maintenance Plan. Any changes made to the Operation and Maintenance Plan must have approval by the AQD District Supervisor prior to implementation. The plan, which shall be kept on site and made available upon request, shall include, at a minimum, the following elements: (R 336.1941, 40 CFR 63.342(f)(3))

- a. Operation and maintenance criteria for the decorative chrome plating tank(s), the 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; (R 336.1941, 40 CFR 63.342(f)(3)(i)(A))
- b. The work practice standards for the add-on control device(s) and monitoring equipment as identified in Table 1 of 40 CFR 63.342. (R 336.1941, 40 CFR 63.342(f)(3)(i)(B))
- c. Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur. (R 336.1941, 40 CFR 63.342(f)(3)(i)(D))
- 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. (R 336.1941, 40 CFR 63.342(f)(3)(i)(E))
- e. The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63.342. (R 336.1941, 40 CFR 63.342(f)(3)(i)(F))
- 5. If the Operation and Maintenance Plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the Operation and Maintenance Plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. (R 336.1941, 40 CFR 63.342(f)(3)(ii) & (v))
- 6. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the Operation and Maintenance Plan, the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event. (R 336.1941, 40 CFR 63.342(f)(3)(iv))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall equip and maintain each composite mesh pad system with a differential pressure monitoring device. (R 336.1941, 40 CFR 63.343(c), 40 CFR 63.344(d)(5))
- 2. The composite mesh pad system differential pressure on EUPN-12, EUPS-7 and EUCHROME4 shall be operated within ± 2 inches of water column of the pressure drop value established during performance testing. (R 336.1941, 40 CFR 63.343(c)(1)(ii))

V. TESTING/SAMPLING

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

1. The permittee shall perform all applicable performance testing as outlined in 40 CFR 63.344. (R 336.1941, 40 CFR 63.344)

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 as follows: (R 336.1941, 40 CFR 63.342(f), 40 CFR 63.343(c))

- a. Monitor and record the pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than ± 2 inches 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. (R 336.1941, 40 CFR 63.343(c))
- 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. (R 336.1941, 40 CFR 63.342(f), Table 1)
- 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. (R 336.1941, 40 CFR 63.342(f), Table 1)
- d. Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there are no leaks. (R 336.1941, 40 CFR 63.342(f), Table 1)
- e. Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations. (R 336.1941, 40 CFR 63.342(f), Table 1)
- 2. The permittee shall keep at a minimum, the following records required by 40 CFR 63.346, as of the applicable compliance date, in the format and timeframes outlined in 40 CFR 63.346.
 - a. Records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f), identifying the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection, including a record of any actions taken to correct the deficiencies found during the inspection. (R 336.1941, 40 CFR 63.346(b)(1))
 - b. Records of all maintenance performed on the decorative chrome electroplating process tank(s), control device, and monitoring equipment. (R 336.1941, 40 CFR 63.346(b)(2))
 - c. Records of the occurrence, duration, and cause (if known) of each malfunction of the decorative chrome electroplating process, control device, and monitoring equipment. (R 336.1941, 40 CFR 63.346(b)(3))
 - d. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (R 336.1941, 40 CFR 63.346(b)(4))
 - e. Other records, which may take the form of checklists, necessary to demonstrate consistency with provisions of the Operation and Maintenance Plan required by 40 CFR 63.342(f)(3). (R 336.1941, 40 CFR 63.346(b)(5))
 - f. Test reports documenting results of all performance tests. (R 336.1941, 40 CFR 63.346(b)(6))
 - g. All measurements necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e). (R 336.1941, 40 CFR 63.346(b)(7))
 - h. Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected. (R 336.1941, 40 CFR 63.346(b)(8))
 - i. A record of the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the decorative chrome electroplating process, add-on air pollution control, or monitoring equipment. (R 336.1941, 40 CFR 63.346(b)(9))
 - j. A record of the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the decorative chrome electroplating process, add-on air pollution control, or monitoring equipment. (R 336.1941, 40 CFR 63.346(b)(10))
 - k. A record of the total decorative chrome electroplating tank(s) operating time. (R 336.1941, 40 CFR 63.346(b)(11))

- I. All documentation supporting the notification and reports required by 40 CFR 63.9, 40 CFR 63.10, and 40 CFR 63.347. (R 336.1941, 40 CFR 63.346(b)(16))
- 3. The permittee shall keep records of all applicable emission information, monitoring, operating and maintenance information, and recordkeeping to comply with 40 CFR Part 63, Subparts A and N for each decorative chrome electroplating tank at the facility. (R 336.1941, 40 CFR 63.343, 40 CFR 63.346)

See Appendix 4

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall document all performance test results in complete test reports that contain the information required by 40 CFR 63.344(a)(1) through (9). (R 336.1941, 40 CFR 63.344)
- 5. The permittee shall fulfill all applicable reporting requirements outlined in 40 CFR 63.347 and the General Provisions to 40 CFR Part 63, according to the applicability of Subpart A, as identified in Table 1 of 40 CFR Part 63, Subpart N. The notifications and reports include:
 - a. Initial notifications. (R 336.1941, 40 CFR 63.347(c))
 - b. Notification of performance test. (R 336.1941, 40 CFR 63.347(d)
 - c. Notification of compliance status. (R 336.1941, 40 CFR 63.347(e))
 - d. Reports of performance test results. (R 336.1941, 40 CFR 63.347(f))
 - e. A report of ongoing compliance status containing information required in 40 CFR 63.347(g)(3). This report shall be submitted semiannually if no exceedances occurred during the reporting period and quarterly if exceedances occurred in the reporting period. (R 336.1941, 40 CFR 63.347(g))
- 6. The permittee is subject to the preconstruction review requirements of 40 CFR 63.5(a), (b)(1), (b)(5), (b)(6) and (f)(1) as well as the provisions of 40 CFR 63.345, for a new or reconstructed source. (R 336.1941, 40 CFR 63.345)
- 7. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing.² (R 336.2001(3))
- 8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. ² (R 336.2001(4))
- 9. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. ² (R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart N. (40 CFR Part 63, Subparts A and N)

See FGN-1, FGS-1, and EUCHROME4 for additional applicable requirements for the decorative chrome plating tanks.

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).

FGEMERGENCYRICE-SI EMISSION UNIT CONDITIONS

DESCRIPTION

Existing emergency spark ignition engines < 500 HP, located at a major source, that commenced construction or reconstruction before June 12, 2006.

Emission Unit: EUALNWGENSET

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. EUALNWGENSET shall be installed, maintained, and operated in a satisfactory manner. The permittee shall meet the following work practice standards as specified in 40 CFR 63.6602 and Table 2c, Item 1. The permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.4.
 - b. Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the affected source is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required, the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. (40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c, Item 1)

- 2. The permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the source at all times. (40 CFR 63.6605(a))
- 3. The permittee, at all times, must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which 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 63.6605(b))

4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required in Table 2c. (40 CFR 63.6625(j))

- 5. If the analytical results of the oil analysis program for emergency stationary engines indicate any of the following limits are exceeded, the permittee shall change the oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 days or before commencing operation, whichever is later. (40 CFR 63.6625(i))
 - a. Total Acid Number increases by more than 2.0 milligrams of potassium hydroxide (KOH) per gram from when the oil was new.
 - b. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new.
 - c. Percent water content (by volume) is greater than 0.5.
- 6. The permittee shall maintain and operate the stationary RICE per the manufacturer's emission related written instructions or develop a maintenance plan which must provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. (40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, Item 9)
- 7. The permittee shall minimize the time spent at idle during startup and minimize the startup time of the stationary RICE to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))
- 8. The permittee shall not exceed 100 hours per year for maintenance checks and readiness testing. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (40 CFR 63.6640(f)(1)(ii))
- 9. The permittee may operate the EUALNWGENSET up to 50 hours per year for non-emergency situations but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Up to 15 hours per year can be used as part of a demand response program. (40 CFR 63.6640(f)(1)(iii))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUALNWGENSET with a non-resettable hour meter to track the number of operating hours. (40 CFR 63.6625(f))

V. TESTING/SAMPLING

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

1. If using the oil analysis program, the permittee shall at a minimum analyze the oil for the Total Acid Number, Viscosity, and percent water. (40 CFR 63.6625(i))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall keep the following records:
 - a. Records of the occurrence and duration of each malfunction of operation or the air pollution control monitoring equipment. (40 CFR 63.6655(a)(2), 40 CFR 63.6660)

- b. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5), 40 CFR 63.6660)
- c. Records to demonstrate continuous compliance with operating limitations in SC III.1. (40 CFR 63.6655(d), 40 CFR 63.6660)
- d. Records of the maintenance conducted to demonstrate the engine and after-treatment control device (if any) were operated and maintained according to the manufacturer's emission related written instructions or developed maintenance plan. (40 CFR 63.6655(e), 40 CFR 63.6660)
- e. Records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation including what classified the operation as emergency and how many hours were spent during non-emergency operation. If the engines were used for demand response operation, the permittee shall keep records of the notification of the emergency situation and the time the engine was operated as part of demand response. (40 CFR 63.6655(f), 40 CFR 63.6660)

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

 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 of October 19, 2013. (40 CFR 63.6595(a)(1), 40 CFR Part 63, Subparts A and ZZZZ)

FGBOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

Emission Units: EUBOILER1-S, EUBOILER2-S, EUBOILER1-N, EUBOILER2-N

The collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the units designed to burn gas 1 fuel subcategory as defined in 40 CFR 63.7575. At the time of permit renewal:

Less than 5 MMBtu/hr	EUBOILER1-S, EUBBOILER2-S
Equal to or greater than	EUBOILER1-N, EUBOILER2-N
5 MMBtu/hr and less	
than 10 MMBtu/hr	
Equal to or greater than	N/A
10 MMBtu/hr	

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas. (40 CFR 63.7499(I))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must meet the tune-up and Energy Assessment work practice standards for each applicable boiler or process heater at the source. (40 CFR 63.7500(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3, Nos. 1-4)
- 2. The permittee must operate and maintain affected sources 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))
- 3. The permittee may obtain approval from the Administrator to use an alternative to the work practice standards noted in SC III.1 and SC III.2. (40 CFR 63.7500(b))
- 4. The permittee must:
 - a. Complete a tune-up every 5 years (61 months) for boilers/process heaters less than or equal to 5 million Btu per hour. (40 CFR 63.7500(e), 40 CFR 63.7515(d))
 - b. Complete a tune-up every 2 years (25 months) for boilers greater than 5 million Btu per hour and less than 10 million Btu per hour. (40 CFR 63.7500(e), 40 CFR 63.7515(d))
 - c. Complete a tune-up annually (13 months) for boilers greater than 10 million Btu per hour. (40 CFR 63.7540(a)(10), 40 CFR 63.7515(d))

- d. Conduct the tune-up within 30 calendar days of startup, if the unit is not operating on the required date for a tune-up. (40 CFR 63.7540(a)(13))
- e. Follow the procedures described in SC IX 4.a through SC IX 4.f for all initial and subsequent tune ups. (40 CFR 63.7540(a)(10), 40 CFR Part 63, Subpart DDDDD, Table 3)
- f. Complete the Initial tune ups on all affected units no later than January 31, 2016, except as provided in 40 CFR 63.7510(j) and 40 CFR 63.7540(a)(13).
- 5. The permittee must complete the one-time energy assessment no later than January 31, 2016. (40 CFR 63.7510(e))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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 a copy of each notification and report 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))
- 2. 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. The permittee can keep the records off site for the remaining 3 years. (40 CFR 63.7560(a), (b), & (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 submit a Notification of Compliance Status that includes each boiler or process heater before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain the following information. (40 CFR 63.7545(e))
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned. (40 CFR 63.7545(e)(1))
 - b. Certification(s) of compliance, as applicable, and signed by a responsible official: (40 CFR 63.7545(e)(8))
 - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))

- ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." (40 CFR 63.7545(e)(8)(ii))
- 5. The permittee must submit boiler tune-up compliance reports. The first compliance report shall cover the period January 31, 2016 thru December of the year in which the tune up was completed and must be postmarked or submitted no later than March 15th of the reporting year that immediately follows the year in which the tune-up was completed. Subsequent compliance reports must be postmarked or submitted by March 15th of the year following the tune-up and must cover the applicable 1, 2, or 5 year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must be submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). A hardcopy of the compliance report shall be submitted to the state. At the discretion of the Administrator, the permittee must submit these reports, in the format specified by the Administrator. (40 CFR 63.7550(b), 40 CFR 63.10(a)(5), 40 CFR 63.7550(h)(3))
- 6. The permittee must include the following information in the compliance report. (40 CFR 63.7550(c), 40 CFR 63.7550(c)(1))
 - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
 - d. The total operating time during the reporting period. (40 CFR 63.7550(c)(5)(iv))
 - e. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, for existing boilers and process heaters, unless an extension has been granted per 40 CFR 63.6(i). (40 CFR 63.7495(b))
- 2. The permittee must be in compliance with the applicable work practice standards. (40 CFR 63.7505(a))
- 3. For affected sources (as defined in 40 CFR 63.7490) 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 within 30 days of startup by following the procedures described in SC IX 4.a through 4.f. (40 CFR 63.7515(g))
- 4. The permittee must demonstrate continuous compliance with the tune-up requirement by completing the following: (40 CFR 63.7540(a))
 - a. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). 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))
 - b. 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))

- c. 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))
- d. 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))**
- e. 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))
- f. Maintain on-site and submit, if requested by the Administrator, the most recent periodic report containing the information as listed below. (40 CFR 63.7540(a)(10)(vi))
 - i. The concentrations of CO in the effluent stream in parts per million 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))
 - ii. A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
 - iii. 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))
- 5. If the boiler or process heater has a heat input capacity of less than or equal to 5 million Btu per hour, the permittee may delay the burner inspection specified in SC IX 4.a until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. (40 CFR 63.7540(a)(12))

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).

FGCOLDCLEANERS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

FLEXIBLE GROUP CONDITIONS

Emission Unit: EUCOLDCLEANERS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. (R 336.1707(2)(a))
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. (R 336.1707(2)(b))
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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/	Michigan Department of Environment,	gr	Grains		
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant		
EGLE	Michigan Department of Environment,	Hg	Mercury		
1	Great Lakes, and Energy	hr	Hour		
EU	Emission Unit	HP	Horsepower		
FG	Flexible Group	H_2S	Hydrogen Sulfide		
GACS	Gallons of Applied Coating Solids	kW	Kilowatt		
GC	General Condition	lb	Pound		
GHGs	Greenhouse Gases	m	Meter		
HVLP	High Volume Low Pressure*	mg	Milligram		
ID	Identification	mm	Millimeter		
IRSL	Initial Risk Screening Level	MM	Million		
ITSL	Initial Threshold Screening Level	MW	Megawatts		
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds		
MACT	Maximum Achievable Control Technology	NO_x	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10		
NA	Not Applicable		microns in diameter		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter		
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour		
Nepe	Air Pollutants New Source Performance Standards	ppm	Parts per million		
NSPS NSR	New Source Review	ppmv	Parts per million by volume		
PS	Performance Specification	ppmw %	Parts per million by weight Percent		
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	•	Pounds per square inch gauge		
PTI	Permit to Install	psig scf	Standard cubic feet		
RACT	Reasonable Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SNCR	Selective Catalytic Reduction Selective Non-Catalytic Reduction	THC	Total Hydrocarbons		
SRN	State Registration Number	tpy	Tons per year		
TEQ	Toxicity Equivalence Quotient		Microgram		
USEPA/EPA	United States Environmental Protection	μg μm	Micrometer or Micron		
JOLI A/LFA	Agency	VOC	Volatile Organic Compounds		
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^{*}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

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

FGNESHAPN

The permittee shall use the Daily Process Operations Record Form. Alternate formats must meet the provisions of 40 CFR Part 63, Subpart N and be approved by the AQD District Supervisor.

EGLE

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

DAILY PROCESS OPERATIONS RECORD

This information is required by Article II, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in penalties and/or imprisonment.

<u>Applicable Rule:</u> 40 CFR Part 63, Subpart N--National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

All affected facilities must maintain records of the amount of time each affected tank is in operation. If an affected facility is using a nonresettable ampere-hr meter to demonstrate that it is a small, hard chromium electroplating facility, records of the actual rectifier usage (amp-hrs) must be maintained. Records must be maintained on file for five years and made available upon request for inspection by the Michigan Department of Environment, Great Lakes, and Energy.

Tank ID #	Date	Hours of Operation

Plant Name and Location

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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 FGN-1, FGS-1, EUCHROME4 and FGNESHAPN. Any alternatives to the following test methods shall be approved by the Air Quality Division or the USEPA where applicable.

- 1. Formaldehyde Method 316.
- 2. Total Chromium Reference Method 29.
- 3. Hexavalent Chromium Reference Method 306
- 4. Nickel Reference Method 29.
- 5. 1,3 Dichloro-2-propanol Reference Method 18.

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-N0895-2012. 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-N0895-2012 is being reissued as Source-Wide PTI No. MI-PTI-N0895-2018.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
120-17	NA	Addition of a stack for ventilation of nickel	FGS-1
		emissions.	

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-P0374-2017.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
59-19	201900113 / September 27, 2019	The Minor Modification was to incorporate PTI No. 59-19. This PTI was for an additional conditioner (pre-etch) tank in the north plater flexible group, FGN-1 as its Airlane North facility in Kentwood. It is possible this new tank will allow them to remove an existing tank, EUPN-11, but they won't know until they've operated with the new tank for a while. The PTI application was not required to go through the Public Participation process.	EUPN-14 FGN-1

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 the 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.