

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

February 22, 2023

**PERMIT TO INSTALL**  
189-90H

**ISSUED TO**  
Ventra Ionia Main, LLC

**LOCATED AT**  
14 North Beardsley Road  
Ionia, Michigan 48846

**IN THE COUNTY OF**  
Ionia

**STATE REGISTRATION NUMBER**  
N0923

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: <b>February 7, 2023</b>	
DATE PERMIT TO INSTALL APPROVED: <b>February 22, 2023</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**

**Table of Contents**

COMMON ACRONYMS .....2  
POLLUTANT / MEASUREMENT ABBREVIATIONS.....3  
GENERAL CONDITIONS .....4  
EMISSION UNIT SPECIAL CONDITIONS.....6  
    EMISSION UNIT SUMMARY TABLE .....6  
    EUHCLSCRUB .....7  
    EUCRETCH .....9  
FLEXIBLE GROUP SPECIAL CONDITIONS..... 11  
    FLEXIBLE GROUP SUMMARY TABLE ..... 11  
    FGCRTANKS..... 12

### COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

### POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

## GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install 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 this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit 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 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. 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 Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

## EMISSION UNIT SPECIAL CONDITIONS

### 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
EUHCLSCRUB	Hydrochloric acid scrubber system that controls tanks M-7, M-10, M-11 and M-15	July 2007	NA
EUCRETECH	Chrome etch process (Tanks M-1, M-1A, and M-2) with scrubber system for control.	July 2007	NA
EUCRTANK1	One decorative chrome electroplating tank (M-39) with a three stage composite mesh pad scrubber (SCB01) and fume suppressant for controls.	July 2007 10/5/2022	FGCRTANKS
EUCRTANKS2	Two decorative chrome electroplating tanks (35N, 36N) with a three stage composite mesh pad scrubber (SCB02) and fume suppressant for controls.	2000 / July 2007 TBD	FGCRTANKS
EUCRTANKS3	Two decorative chrome electroplating tanks (M-40, 37N) with a three stage composite mesh pad scrubber (SCB03) and fume suppressant for controls.	2000 / July 2007 TBD	FGCRTANKS
EUEVAPORATOR	One evaporator for the recovery of chromic acid from spent rinse water produced by Rinse Tanks M41-M44. This evaporator is vented to SCB01.	January 2017	FGCRTANKS

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

<b>EUHCLSCRUB EMISSION UNIT CONDITIONS</b>
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**DESCRIPTION**

Hydrochloric acid scrubber system that controls tanks M-7, M-10, M-11 and M-15.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Hydrochloric acid scrubber system.

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate any of the tanks in EUHCLSCRUB unless the scrubber system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining the pressure drop across the scrubber system as specified by the manufacturer. **(R 336.1224, R 336.1225, R 336.1910)**

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

1. The permittee shall equip and maintain the scrubber system in EUHCLSCRUB with a differential pressure monitoring device. **(R 336.1224, R 336.1225, R 336.1910)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor, in a satisfactory manner, the pressure drop across the scrubber system for EUHCLSCRUB on a weekly basis. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, weekly records of the pressure drop for EUHCLSCRUB. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **(R 336.1225, R 336.1910)**

**VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVSCB08	72	40	40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

<b>EUCRETCH EMISSION UNIT CONDITIONS</b>
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**DESCRIPTION**

Chrome etch process (Tanks M-2)

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Scrubber system.

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate any of the tanks in EUCRETCH unless the scrubber system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining the pressure drop across the scrubber system as specified by the manufacturer. **(R 336.1224, R 336.1225, R 336.1910)**

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

1. The permittee shall equip and maintain the scrubber system in EUCRETCH with a differential pressure monitoring device. **(R 336.1224, R 336.1225, R 336.1910)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor, in a satisfactory manner, the pressure drop across the scrubber system for EUCRETCH on a weekly basis. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, weekly records of the pressure drop for EUCRETCH. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **(R 336.1225, R 336.1910)**

**VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVSCB07	64	50	40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## FLEXIBLE GROUP SPECIAL CONDITIONS

### FLEXIBLE GROUP SUMMARY TABLE

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

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FGCRTANKS	Five (5) decorative chrome electroplating tanks that use three-stage scrubbers and fume suppressant for control and an evaporator used to recover chromic acid from the spent rinse water produced by the plastic parts plating line.	EUCRTANK1, EUCRTANKS2, EUCRTANKS3, EUEVAPORATOR

**FGCRTANKS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Five (5) decorative chrome electroplating tanks that use three-stage scrubbers and fume suppressant for control and an evaporator, controlled by a mist eliminator and vented to a scrubber, used to recover chromic acid from the spent rinse water produced by the plastic parts plating line.

**Emission Unit:** EUCRTANK1, EUCRTANKS2, EUCRTANKS3, EUEVAPORATOR

**POLLUTION CONTROL EQUIPMENT**

- Tank M-39 is controlled by a three-stage wet scrubber (SCB01) and fume suppressant.
- Tanks 35N and M-36N are controlled by a three-stage composite mesh pad scrubber (SCB02) and fume suppressant.
- Tanks M-40 and M-37N are controlled by a three-stage composite mesh pad scrubber (SCB03) and fume suppressant.
- EUEVAPORATOR is controlled by a mist eliminator and is exhausted to a wet scrubber (SCB01).

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. Total Chromium	0.00014 pph	Hourly*	EUCRTANK1 and EUEVAPORATOR	SC VI.6, SC VI.9, SC VI.10	R 336.1225
2. Total Chromium <sup>a</sup>	0.0003 pph	Hourly*	EUCRTANKS2	SC VI.6, SC VI.9, SC VI.10	R 336.1225
3. Total Chromium <sup>b</sup>	0.00014 pph	Hourly*	EUCRTANKS3	SC VI.6, SC VI.9, SC VI.10	R 336.1225
4. Total chromium	0.006 mg/dscm <sup>c</sup>	Hourly*	EUCRTANK1	SC VI.2, SC VI.3, SC VI.7	40 CFR 63.342(d)(2)
5. Total Chromium <sup>d</sup>	0.006 mg/dscm <sup>c</sup>	Hourly*	EUCRTANKS2	SC V.1, SCVI.2, SC VI.3, SC VI.8	40 CFR 63.342(d)(2)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
6. Total Chromium <sup>e</sup>	0.006 mg/dscm <sup>c</sup>	Hourly <sup>*</sup>	EUCRTANKS3	SC V.2, SCVI.2, SC VI.3, SC VI.8	40 CFR 63.342(d)(2)

\* Based on the average of the test runs performed  
<sup>a</sup> This limit applies prior to the date EUCRTANKS2 has been permanently converted to the foam blanket fume suppressant.  
<sup>b</sup> This limit applies prior to the date EUCRTANKS3 has been permanently converted to the foam blanket fume suppressant.  
<sup>c</sup> Corrected to 70°F and 29.92 inches Hg  
<sup>d</sup> This limit applies on and after the date EUCRTANKS2 has been permanently converted to the foam blanket fume suppressant.  
<sup>e</sup> This limit applies on and after the date EUCRTANKS3 has been permanently converted to the foam blanket fume suppressant.

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall retain on-site, and update as necessary, an operation and maintenance plan approved by the AQD District Supervisor. The plan shall contain all information required by 40 CFR 63.342(f)(3)(i), which includes the following: **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
  - a) Operation and maintenance criteria for EUCRTANK1, EUCRTANKS2, EUCRTANKS3, 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.
  - e) Proper operation procedures for use of a stalagmometer or tensiometer shall be included in the operation and maintenance plan.
  
2. The permittee shall retain on-site, and update as necessary, an approvable operation and maintenance plan for EUEVAPORATOR approved by the AQD District Supervisor. The permittee shall retain the operation and maintenance plan on-site, and update as necessary. The plan shall contain all of the following: **(R 336.1225, R 336.1910)**
  - a) Operation and maintenance criteria for EUEVAPORATOR, add-on control device(s), and 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 any decorative chrome plating tank in EUCRTANKS2 or EUCRTANKS3 that is using the chemical fume suppressant unless the chemical fume suppressant is applied in quantities and at a frequency to ensure the surface tension of the decorative chrome plating tank does not exceed, at any time during operation, 40 dynes/cm ( $2.8 \times 10^{-3}$  pound-force per foot) as measured by a stalagmometer or does not exceed 33 dynes/cm ( $2.3 \times 10^{-3}$  pound-force per foot) as measured by a tensiometer. **(R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
4. While any decorative chrome plating tank in EUCRTANKS2 or EUCRTANKS3 is using the foam blanket fume suppressant and after completing the stack test required in SC V.1, the permittee shall either:
  - a) Not allow the surface tension of the electroplating bath contained within the decorative chrome plating tank to exceed the surface tension established during the performance test required in 40 CFR 63.343(b) at any time during tank operation. **(R 336.1941, 40 CFR 63.342(d)(3), 40 CFR 63.343(c)(5))**
  - b) Or, not allow the thickness of the foam blanket contained within the decorative chrome plating tank to be less than 2.54 centimeters (1 inch) or the minimum thickness established during the performance test that corresponds to compliance with the applicable emission limitation. **(R 336.1941, 40 CFR 63.342(d), 40 CFR 63.343(c)(6) or (7))**
5. After completing the stack test required for EUCRTANK1, the permittee shall either:
  - a) Not allow the surface tension of the electroplating bath contained within the decorative chrome plating tank in EUCRTANK1 to exceed the surface tension established during the performance test required in 40 CFR 63.343(b) at any time during tank operation. **(R 336.1941, 40 CFR 63.342(d)(3), 40 CFR 63.343(c)(5))**
  - b) Or, not allow the thickness of the foam blanket contained within the decorative chrome plating tank in EUCRTANK1 to be less than 2.54 centimeters (1 inch) or the minimum thickness established during the performance test that corresponds to compliance with the applicable emission limitation. **(R 336.1941, 40 CFR 63.342(d), 40 CFR 63.343(c)(6) or (7))**
6. The permittee shall use fresh water for any make-up water. **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
7. The permittee shall not add PFOS-based fume suppressants to any chromium electroplating tank. **(R 336.1941, 40 CFR 63.342(d)(4))**

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

1. The permittee shall not operate EUCRTANK1, EUCRTANKS2, EUCRTANKS3, or EUEVAPORATOR unless the respective wet scrubber and the two mesh pad scrubbers are each installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1901, R 336.1941, 40 CFR Part 63 Subpart N)**
2. The permittee shall equip and maintain each of the FGCRANKS scrubbers with a differential pressure monitoring device. **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
3. The permittee shall not operate EUEVAPORATOR unless the mist eliminator is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225)**

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

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days after converting any decorative chrome plating tank in EUCRTANKS2 to the foam blanket fume suppressant, the permittee shall verify total chromium emission rates from EUCRTANKS2, 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 Technical Programs Unit and District Office. The AQD must approve the final plan prior to

testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1941, R 336.2001, R 336.2002, R 336.2003, 40 CFR Part 63 Subparts A & N)**

2. Within 180 days after converting any decorative chrome plating tank in EUCRTANKS3 to the foam blanket fume suppressant, the permittee shall verify total chromium emission rates from EUCRTANKS3, 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 Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1941, R 336.2001, R 336.2002, R 336.2003, 40 CFR Part 63 Subparts A & N)**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.<sup>1</sup> **(R 336.1225)**
2. When complying with SC III.5.a for EUCRTANK1 and SC III.3 and/or SC III.4.a for any decorative chrome plating tank in EUCRTANKS2 and/or EUCRTANKS3, the permittee shall monitor, in a satisfactory manner, the surface tension of the decorative chrome plating tank(s) complying with SC III.3, SC III.4.a, and SC III.5.a 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. An example of monitoring frequency is available at 40 CFR 63.343(c)(5)(ii)(C). The surface tension shall be monitored with a stalagmometer or tensiometer as specified in Method 306B of 40 CFR Subpart N. **(R 336.1225, R 336.1910, R 336.1941, 40 CFR 63.343(c)(5))**
3. When complying with SC III.5.b for EUCRTANK1 and SC III.4.b for any decorative chrome plating tank in EUCRTANKS2 and/or EUCRTANKS3, the permittee shall monitor the foam blanket thickness of the decorative chrome plating tank(s) complying with SC III.5.b and SC III.4.b, once every hour of tank operation for the first 40 hours of tank operation after the applicable compliance date and once a bath solution is drained from the affected tank and a new solution added. If there are no exceedances during the first 40 hours of tank operation, foam thickness measurements may be conducted once every four (4) 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 four (4) hours, then foam blanket thickness measurements may be conducted once every eight (8) hours of tank operation on an ongoing basis, until an exceedance occurs. Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour 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 eight (8) hours of tank operation. All foam blanket measurements must be taken in close proximity to the workpiece or cathode area in the plating tank(s). **(R 336.1941, 40 CFR 63.343(c)(6))**
4. The permittee shall perform inspections of the three stage wet scrubber system for EUCRTANK1 as follows: **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**

- a) Determine pressure drop across the packed bed scrubber on a daily basis. If the pressure drop across the control varies by more than  $\pm 1$  inch of water gauge over a 24 hour period, the variation shall be documented, and the operation and maintenance procedures shall be reviewed. Any corrective action shall be documented.
  - b) Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
  - c) Visually inspect the back portion of the chevron-blade mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough of chromic acid mist.
  - d) Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
5. The permittee shall perform inspections of the composite mesh pad (CMP) systems for EUCRTANKS2 and EUCRTANKS3 as follows: **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
- a) Determine pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than  $\pm 1$  inch of water gauge over a 24 hour period, the variation shall be documented, and the operation and maintenance procedures shall be reviewed. Any corrective action shall be documented.
  - 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.
6. The permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection. The permittee shall also record any actions taken to correct the deficiencies found during the inspection. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1910, R 336.1941, 40 CFR Part 63 Subpart N)**
7. The permittee shall keep records of either of the following:
- a) When EUCRTANK1 is complying with SC III.5.a, the surface tension of the plating bath, the amount of chemical fume suppressant added to the tank, and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1941, 40 CFR Part 63 Subparts A & N)**
  - b) Or, when EUCRTANK1 is complying with SC III.5.b, the thickness of the foam blanket in the tank, the amount of chemical fume suppressant added to the tank, and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1941, 40 CFR Part 63 Subparts A & N)**
8. The permittee shall keep records of either of the following:
- a) For any decorative chrome plating tank in EUCRTANKS2 and/or EUCRTANKS3 complying with SC III.3 or SC III.4.a, the surface tension of the plating bath, the amount of chemical fume suppressant added to the tank, and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1941, 40 CFR Part 63 Subparts A & N)**
  - b) For any decorative chrome plating tank in EUCRTANKS2 and/or EUCRTANKS3 complying with SC III.4.b, the thickness of the foam blanket in the tank, the amount of chemical fume suppressant added to the tank, and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1941, 40 CFR Part 63 Subparts A & N)**
9. The permittee shall keep records of emission information and operating and maintenance information to comply with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and N. The permittee shall keep all source emissions and operating and maintenance information on file at the facility and make them available to the Department upon request. **(R 336.1941, 40 CFR Part 63 Subpart N)**

10. The permittee shall keep records of the surface tension of each tank in FGCRANKS, the amount of chemical fume suppressant added to each tank in FGCRANKS and the date and time of each addition. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1941, 40 CFR Part 63 Subpart N)**
11. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, an up to date record of the specific fume suppressant in use in each chrome plating tank in FGCRANKS and the 40 CFR Part 63 Subpart N compliance method (surface tension or foam blanket thickness) being used for each chrome plating tank in FGCRANKS. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1941, 40 CFR Part 63 Subparts A & N)**

## **VII. REPORTING**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than the first use of the foam blanket fume suppressant in EUCRANKS2 or EUCRANKS3. **(R 336.1201(7)(a))**
2. The permittee shall submit the following notifications to the Department in accordance with 40 CFR 63.347:
  - a) A notification of the date when construction was commenced, submitted no later than 30 calendar days after such date.
  - b) A notification of the actual date of startup of the source, submitted within 30 calendar days after such date. **(R 336.1941, 40 CFR Part 63 Subparts A & N)**
3. Within 30 days after permanently converting EUCRANKS2 and EUCRANKS3 to the foam blanket fume suppressant, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. **(R 336.1201(7)(a))**

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVSCB01	39	63	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SVSCB02	39	63	R 336.1225, 40 CFR 52.21 (c) & (d)
3. SVSCB03	39	63	R 336.1225, 40 CFR 52.21 (c) & (d)

## **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. **(R 336.1941, 40 CFR Part 63, Subparts A and N)**

### **Footnotes:**

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