MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

October 3, 2016

PERMIT TO INSTALL 121-16

ISSUED TO Adept Plastic Finishing, Inc.

LOCATED AT 48668 Alpha Drive Wixom, Michigan

IN THE COUNTY OF Oakland

STATE REGISTRATION NUMBER P0727

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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: September 13, 2016			
DATE PERMIT TO INSTALL APPROVED: October 3, 2016	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table	5
Special Conditions for EUSYSTEM2	6
Special Conditions for EUCHROME5	9
Flexible Group Summary Table	12
Special Conditions for FGSYSTEMS	13

Common Abbreviations / Acronyms

	Common Acronyms	I	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	со	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit
department	Quality	gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H ₂ S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental	NOx	Oxides of Nitrogen
MCDC	Quality	ng	Nanogram
MSDS NA	Material Safety Data Sheet Not Applicable	PM	Particulate Matter Particulate Matter equal to or less than 10
NAAQS	National Ambient Air Quality Standards	PM10	microns in diameter
NESHAP	National Emission Standard for Hazardous	PM2.5	Particulate Matter equal to or less than 2.5
NODO	Air Pollutants		microns in diameter
NSPS NSR	New Source Performance Standards New Source Review	pph	Pounds per hour Parts per million
PS	Performance Specification	ppm ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection	μg	Microgram
	Agency	μm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

GENERAL CONDITIONS

- 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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (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, 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 R 336.1301, 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 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.
- 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 R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

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 (Process Equipment & Control Devices)	Flexible Group ID
EUSYSTEM1	Nickel plating process. This system consists of five process tanks that are controlled by a packed bed wet scrubber and mist eliminator. The tanks are tank 37 (semi bright nickel), tank 38 (semi bright nickel), tank 39 (high sulfur), tank 40 (bright nickel), and tank 41 (micro porous nickel).	FGSYSTEMS
EUSYSTEM2	Acid etch process (four tanks) and chrome recovery system. The tanks are tank 3 (spray cleaner), tank 5 (PC ABS etch), tank 6 (ABS etch) and tank 7 (etch dragout). Tanks 5 and 6 are equipped with local scrubbers and use a fume suppressant for additional control. Tanks 3 and 7 are equipped with a two-stage composite mesh pad. The chrome recovery process consists of a porous pot tank that works as a closed loop with tanks 5 and 6 and an evaporator that tank 7 overflows to. The evaporator is equipped with a two-stage inline mist eliminator.	NA
EUSYSTEM3	Pre-plate process. This system consists of seven tanks controlled by a packed bed wet scrubber. The tanks are tank 12 (neutralizer), tank 16 (activator pre-dip), tank 17 (activator), tank 21 (accelerator), tank 28 (copper strike), and tanks 30 and 31 (acid copper).	FGSYSTEM
EUSYSTEM4	Electroless nickel process. This system consists of one tank, tank 24 (electroless nickel), controlled by a packed bed wet scrubber.	FGSYSTEM
EUCHROME5	Decorative chrome process. This process consists of three tanks controlled by a composite mesh pad system and fume suppressant. The tanks are tank 45 (tri-chrome), tank 49 (decorative chrome plating), and tank 50 (chrome dragout).	NA
EUSYSTEM6	Nitric strip process. This process consists of two tanks controlled by a packed bed wet scrubber. The tanks are tank 60 (chrome strip) and tank 63 (nitric strip). The waste treatment area will also exhaust to the System 6 scrubber.	FGSYSTEM
Changes to the equipm allowed by R 336.1278	ent described in this table are subject to the requirements of R 336.120 to R 336.1290.	1, except as

The following conditions apply to: EUSYSTEM2

DESCRIPTION: Acid etch process (four tanks) and chrome recovery system. The tanks are tank 3 (spray cleaner), tank 5 (PC ABS etch), tank 6 (ABS etch) and tank 7 (etch dragout). The chrome recovery process consists of a porous pot tank that works as a closed loop with tanks 5 and 6 and an evaporator that tank 7 overflows to.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Tanks 5 and 6 are equipped with local scrubbers and a fume suppressant for Tanks 5 and 6. Tanks 3 and 7 are equipped with a two-stage composite mesh pad. The evaporator is equipped with a two-stage in-line mist eliminator.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Total	0.00015 pph ¹	Test protocol*	EUSYSTEM2	SC V.1, VI.4,	R 336.1224
chromium				VI.5	R 336.1225
* Test protocol shall determine averaging time.					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 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 of the following: (R 336.1224, R 336.1225, R 336.1910)
 - a) Operation and maintenance criteria for each scrubber, mesh pad, and mist eliminator in EUSYSTEM2 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.
- 2. The permittee shall not operate tank 5 or 6 in EUSYSTEM2 unless the chemical fume suppressant is applied in quantities and at a frequency to ensure the surface tension of tank 5 and 6 does not exceed 35 dynes/cm (2.4x10⁻³ lb_//ft), when measured using a tensiometer, or an acceptable surface tension as determined during testing, at any time during tank operation. (R 336.1224, R 336.1225, R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate any process tank in EUSYSTEM2 unless the associated pollution control equipment is installed, maintained, and operated in a satisfactory manner. Satisfactory operation shall include but is not limited to maintaining the pressure drop across the scrubbers and composite mesh pad per manufacturer specifications or as determined during compliance testing. (R 336.1224, R 336.1225, R 336.1910)
- 2. The permittee shall equip and maintain the packed bed scrubber and composite mesh pad in EUSYSTEM2 with pressure differential monitoring devices. (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))

 Within 180 days after initial startup, verification of total chromium emission rates from EUSYSTEM2, by testing at owner's expense, in accordance with Department requirements, will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD 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. (R 336.1224, R336.1225, R336.2001, R336.2003, R336.2004)

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 surface tension of tanks 5 and 6 in EUSYSTEM2 once every four (4) hours during tank operation for the first 40 hours of tank operation. If there are no exceedances during the first 40 hours of tank operation for the next 40 hours of tank operation. If there are no exceedances during the 40 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 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. (R 336.1224, R 336.1225, R 336.1910)
- 2. The permittee shall perform inspections of the packed bed scrubber as follows: (R 336.1224, R 336.1225, R 336.1910)
 - a) Determine pressure drop across the packed bed scrubber on a daily basis. If the pressure drop across the control varies by more than ±1 inch of water column, 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 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 mist eliminator (chevron blade), 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.
 - e) Add fresh make-up water as needed.

- 3. The permittee shall perform inspections of the composite mesh pad (CMP) system as follows: (R 336.1224, R 336.1225, R 336.1910)
 - a) Determine pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than ±2 inch of water column, 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 (at a minimum of once per week).
- 4. The permittee shall maintain records of the inspections as required by SC VI.2 and VI.3. 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 for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1910)
- 5. The permittee shall keep records of the surface tension of tanks 5 and 6 in EUSYSTEM2, the amount of chemical fume suppressant added to each tank 5 and 6 in EUSYSTEM2 and the date and time of each addition. The permittee shall keep all records on file for a period of five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1910)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSYSTEM2	44	42	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EUCHROME5

DESCRIPTION: Decorative chrome process. This process consists of three tanks: tank 45 (tri-chrome), tank 49 (decorative chrome plating), and tank 50 (chrome dragout).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Composite mesh pad system and fume suppressant.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Total	0.006 milligram per	Test protocol*	EUCHROME5	SC V.1, VI.4,	R 336.1225,
chromium	dry standard cubic			VI.5, VI.6	40 CFR Part 63
	meter, corrected to				Subparts A & N
	70°F and 29.92				
	inches Hg				
2. Total	0.000042 pph	Test protocol*	EUCHROME5	SC V.1, VI.4,	R 336.1225
chromium		-		VI.5, VI.6	
* Test protocol shall determine averaging time.					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 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 336.1225, R 336.1910, 40 CFR Part 63 Subpart N)
 - a) Operation and maintenance criteria for EUCHROME5, 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.
- The permittee shall not operate EUCHROME5 unless the chemical fume suppressant is applied in quantities and at a frequency to ensure the surface tension of EUCHROME5 does not exceed 45 dynes/cm (3.1x10⁻³ lb_f/ft), when measured using a stalagmometer, or 35 dynes/cm (2.4x10⁻³ lb_f/ft), when measured using a tensiometer, at any time during operation. (R 336.1225, R 336.1910, 40 CFR Part 63 Subpart N)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate EUCHROME5 unless the composite mesh pad system is installed, maintained, and operated in a satisfactory manner. (R 336.1225, R 336.1910, 40 CFR Part 63 Subpart N)
- 2. The permittee shall equip and maintain the EUCHROME5 composite mesh pad system with a differential pressure monitoring device. (R 336.1225, R 336.1910, 40 CFR Part 63.343(c))

V. TESTING/SAMPLING

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

 Within 180 days after initial startup, the permittee shall verify total chromium emission rates from EUCHROME5, 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. (R 336.1225, 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 monitor, in a satisfactory manner, the surface tension of EUCHROME5 every once every four (4) hours during 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, appendix A of 40 CFR Part 63, except as allowed in 40 CFR 63.343(c)(5). (R 336.1225, R 336.1910, 40 CFR Part 63 Subparts A & N)
- 2. The permittee shall perform inspections of the composite mesh pad (CMP) system as follows: (R 336.1225, R 336.1910, 40 CFR Part 63 Subparts A & N)
 - a) Determine pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than ±2 inch of water column, 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 (at a minimum of once per week).
- 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. (40 CFR Part 63 Subparts A & N)
- 4. The permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection. The permittee shall also record any actions taken to correct the deficiencies found during the inspection. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1910, 40 CFR Part 63 Subparts A & N)

- 5. 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 for a period of at least five years and make them available to the Department upon request. (40 CFR Part 63 Subparts A & N)
- The permittee shall keep records of the surface tension of EUCHROME5, the amount of chemical fume suppressant added to EUCHROME5 and the date and time of each addition. The permittee shall keep all records on file for a period of five years and make them available to the Department upon request. (R 336.1225, R 336.1910, 40 CFR Part 63 Subparts A & N)

VII. <u>REPORTING</u>

- 1. Permittee shall submit the following notifications to the Department in accordance with 40 CFR Part 63.347: (40 CFR Part 63 Subparts A & N)
 - a) A notification of the performance test at least 60 calendar days before the test is scheduled to begin.
 - b) A notification of compliance status after the performance test has been completed.
 - c) Ongoing compliance status reports as required by 40 CFR 63.347(h).

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCHROME5	26	42	R 336.1225, 40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENTS

 The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and N, as they apply to EUCHROME5. (40 CFR Part 63 Subparts A & N)

Footnotes:

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

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
FGSYSTEMS	Various metal treating tanks, including plating and stripping tanks, that do not contain chromium.	EUSYSTEM1, EUSYSTEM3, EUSYSTEM4, EUSYSTEM6

The following conditions apply to: FGSYSTEMS

DESCRIPTION: Various metal treating tanks, including plating and stripping tanks, that do not contain chromium.

Emission Units: EUSYSTEM1, EUSYSTEM3, EUSYSTEM4, EUSYSTEM6

POLLUTION CONTROL EQUIPMENT: Packed bed wet scrubber and mist eliminator (EUSYSTEM1), packed bed wet scrubber (EUSYSTEM3), packed bed wet scrubber (EUSYSTEM4), and packed bed wet scrubber (EUSYSTEM6)

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Nickel	0.0029 lb/hr ¹	Test protocol*	EUSYSTEM1	GC 13	R 335.1225
2. Nickel	1.96 x10 ⁻⁵ lb/hr ¹	Test protocol*	EUSYSTEM4	GC 13	R 335.1225
* Test protocol shall determine averaging time					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 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 of the following: (R 336.1224, R 336.1225, R 336.1910)
 - a) Operation and maintenance criteria for each scrubber system and mist eliminator in FGSYSTEMS 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.

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate any process tank in FGSYSTEMS unless the associated scrubber system and mist eliminator is installed, maintained, and operated in a satisfactory manner. Satisfactory operation shall include, but is not limited to, maintaining the pressure drop across each scrubber system per manufacturer specifications. (R 336.1224, R 336.1225, R 336.1910)
- 2. The permittee shall equip and maintain each scrubber system in FGSYSTEMS with a pressure differential 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 the pressure drop across each scrubber system in FGSYSTEMS on a daily basis. (R 336.1224, R 336.1225, R 336.1910)
- The permittee shall keep, in a satisfactory manner, daily records of the pressure drop readings for each scrubber system in FGSYSTEMS, as required by SC VI.1. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1910)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSYSTEM1	48	42	R 336.1225, 40 CFR 52.21 (c) and (d)
2. SVSYSTEM3	52	42	40 CFR 52.21 (c) and (d)
3. SVSYSTEM4	24	42	R 336.122540 CFR 52.21 (c) and (d)
4. SVSYSTEM6	36	42	40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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