MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

June 14, 2016

PERMIT TO INSTALL
65-14A

ISSUED TO
Surface Activation Technologies, Inc.

LOCATED AT
1837 Thunderbird Street
Troy, Michigan

IN THE COUNTY OF
Oakland

STATE REGISTRATION NUMBER
N5637

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: **May 17, 2016**	
DATE PERMIT TO INSTALL APPROVED: **June 14, 2016**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

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_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		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_2S	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 Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	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 Agency	µg	Microgram
		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

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 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 conditions 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 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.

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 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
EUNICKELSTRIP	Nickel strip tank (contains nitric acid) controlled by a packed bed scrubber system.	FGPBS
EUCHROMESTRIP	Chrome strip tank (contains hydrochloric acid) controlled by a packed bed scrubber system.	FGPBS
EUCAUSTIC	Caustic activator tank (low concentration sodium hydroxide, boric acid and sulfuric acid) controlled by a packed bed scrubber system.	FGPBS
EUACIDACTIVATOR	Acid activator tank (low concentration boric acid and sulfuric acid) controlled by a packed bed scrubber system.	FGPBS
EUCRACIDACTIV	Chrome acid activator tank (elemental chrome and low concentration of boric acid and sulfuric acid) controlled by a packed bed scrubber system.	FGPBS
EUREDUCER	Reducer tank (low concentration of sodium hydroxide and sodium borohydride) controlled by a packed bed scrubber system	FGPBS
EUELECTROLESSNI	Electroless nickel tank controlled by a packed bed scrubber system.	FGPBS
EUELECTROLESSCU	Electroless copper tank controlled by a packed bed scrubber system.	FGPBS
EUACIDCU	Three Acid copper tanks (contains copper sulfate) controlled by a packed bed scrubber system.	FGPBS
EUACIDCUACTIV	Acid copper activator tank (contains low concentration sodium bisulfate and sodium persulfate) controlled by a packed bed scrubber system.	FGPBS
EUNICKEL1	Three nickel plating tanks controlled by a packed bed scrubber system.	FGPBS
EUNICKEL2	Three nickel plating tanks controlled by a packed bed scrubber system.	FGPBS
EUCHROMERINSE	Chrome pre-rinse and chrome drag out tanks controlled by a packed bed scrubber system.	FGPBS
EUCHROMEETCH	Chromic acid etch tank controlled by a three stage composite mesh pad scrubber system with HEPA filter.	FGCMP
EUCHROME1	Decorative chrome electroplating tank (bright chrome) controlled by fume suppressant and a three stage composite mesh pad scrubber system with HEPA filter.	FGCMP

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EUCHROME2	Decorative chrome electroplating tank (bright chrome) controlled by fume suppressant and a three stage composite mesh pad scrubber system with HEPA filter.	FGCMP
EUCAUSTIC2	Caustic palladium activator tank controlled by a packed bed scrubber system.	FGPBS
EUREDUCER2	Teleplex reducer - reducer tank (low concentration of sodium hydroxide and sodium borohydride) controlled by a packed bed scrubber system.	FGPBS
EUELECTROLESSNI2	Electroless nickel tank controlled by a packed bed scrubber system.	FGPBS
EUELECTROLESSNI3	Electroless nickel tank controlled by a packed bed scrubber system.	FGPBS
EUELECTROLESSCU2	Electroless copper tank controlled by a packed bed scrubber system.	FGPBS
EUACIDCU2	Acid copper tank controlled by a packed bed scrubber system.	FGPBS
EUNICKEL3	Bright nickel plating tank controlled by a packed bed scrubber system.	FGPBS
EUNICKEL4	Satin nickel plating tank controlled by a packed bed scrubber system.	FGPBS
EUNICKEL5	Bright nickel plating tank controlled by a packed bed scrubber system.	FGPBS
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 336.1290.		

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
FGPBS	Consists of two process lines. The first line is a series of 20 process tanks consisting of acid tanks, plating tanks, cleaning tanks and rinse tanks. The second line is a series of 16 process tanks consisting of acid tanks, cleaning tanks, plating tanks and rinse tanks (7 rinse tanks, 1 caustic activator tank, 1 reducer tank, 2 electroless nickel tanks, 1 electroless copper tank, 1 acid copper tank and 3 nickel plating tanks). All non-rinse tanks are controlled by a common packed bed scrubber system with mist eliminator. Rinse tanks are vented to the in-plant environment.	EUNICKELSTRIP, EUCHROMESTRIP, EUCAUSTIC, EUACIDACTIVATOR, EUCRACIDACTIV, EUREDUCER, EUELECTROLESSNI, EUELECTROLESSCU, EUACIDCU, EUACIDCUACTIV, EUNICKEL1, EUNICKEL2, EUCHROMERINSE, EUCAUSTIC2, EUREDUCER2, EUELECTROLESSNI2, EUELECTROLESSNI3, EUELECTROLESSCU2, EUACIDCU2, EUNICKEL3, EUNICKEL4, EUNICKEL5
FGCMP	Two decorative chrome plating tanks and one chrome etch tank that are controlled by a three stage composite mesh pad scrubber system.	EUCHROMEETCH, EUCHROME1, EUCHROME2

The following conditions apply to: FGPBS

DESCRIPTION: Consists of two process lines. The first line is a series of 20 process tanks consisting of acid tanks, plating tanks, cleaning tanks and rinse tanks. The second line is a series of 16 process tanks consisting of acid tanks, cleaning tanks, plating tanks and rinse tanks (7 rinse tanks, 1 caustic activator tank, 1 reducer tank, 2 electroless nickel tanks, 1 electroless copper tank, 1 acid copper tank and 3 nickel plating tanks). All non-rinse tanks are controlled by a common packed bed scrubber system with mist eliminator. Rinse tanks are vented to the in-plant environment.

Emission Units: EUNICKELSTRIP, EUCHROMESTRIP, EUCAUSTIC, EUACIDACTIVATOR, EUCRACIDACTIV, EUREDUCER, EUELECTROLESSNI, EUELECTROLESSCU, EUACIDCU, EUACIDCUACTIV, EUNICKEL1, EUNICKEL2, EUCHROMERINSE, EUCAUSTIC2, EUREDUCER2, EUELECTROLESSNI2, EUELECTROLESSNI3, EUELECTROLESSCU2, EUACIDCU2, EUNICKEL3, EUNICKEL4, EUNICKEL5

POLLUTION CONTROL EQUIPMENT: Packed bed scrubber system with mist eliminator

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Formaldehyde	0.045 pph	Test Protocol*	FGPBS	GC 13	R 336.1225, R 336.1702(a)
2. Methanol	2.5 pph	Test Protocol*	FGPBS	GC 13	R 336.1225, R 336.1702(a)
3. Nickel	0.00010 pph	Test Protocol*	FGPBS	GC 13	R 336.1225
* Test protocol shall specify averaging time					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGPBS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminator, has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
   a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
   b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
   c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any tank in FGPBS unless the packed-bed scrubber system with mist eliminator is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to submitting a malfunction abatement/preventative maintenance plan for the scrubber system as required by SC III.1. **(R 336.1224, R 336.1225, R 336.1910)**

2. The permittee shall equip and maintain the packed-bed scrubber system with mist eliminator with a differential pressure monitoring device. **(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 perform inspections of the packed bed scrubber system as follows: **(R 336.1224, R 336.1225, R 336.1910)**
   a) Determine pressure drop across the packed bed scrubber system on a daily basis. If the pressure drop across the control varies by more than the pressure drop as specified by the manufacturer or as determined during a compliance test, 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 system, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
   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 acid mist.
   d) Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.

2. The permittee shall keep daily records of the pressure drop and records of all operating and maintenance information, as required in SC VI.1. All records shall be kept on file at the facility and made available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1910)**

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 commencement of trial operation of any tank in FGPBS. **(R 336.1201(7)(a))**

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. SVPBS	48	28	R 336.1225

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart WWWWWW, as they apply to each tank in FGPBS. **(40 CFR Part 63, Subpart A & WWWWWW)**

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

The following conditions apply to: FGCMP

DESCRIPTION: Two decorative chrome plating tanks and one chrome etch tank.

Emission Units: EUCHROMEETCH, EUCHROME1, EUCHROME2

POLLUTION CONTROL EQUIPMENT: Fume suppressant for the two decorative chrome plating tanks and a three stage composite mesh pad scrubber system with HEPA filter that control all three tanks

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Total chromium	0.006 mg/dscm[a]	Test Protocol*	EUCHROME1	GC 13	40 CFR Part 63 Subparts A & N
2. Total chromium	0.006 mg/dscm[a]	Test Protocol*	EUCHROME2	GC 13	40 CFR Part 63 Subparts A & N
3. Total chromium	0.000012 pph	Test Protocol*	EUCHROMEETCH	GC 13	R 336.1225

[a] corrected to 70°F and 29.92 inches Hg
* Test protocol shall specify averaging time

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Within 30 calendar days of the date of permit approval, the permittee shall submit to the AQD District Supervisor, an approvable operation and maintenance plan for EUCHROME1 and EUCHROME2. 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 Subparts A & N)**
   a) Operation and maintenance criteria for EUCHROME1 and EUCHROME2, 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.

2. The permittee shall not operate EUCHROMEETCH unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the three stage composite mesh pad scrubber system with HEPA filter, has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
   a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
   b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
   c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

   If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1224, R 336.1225, R 336.1910, R 336.1911)**

3. The permittee shall not operate any of the decorative chrome plating tanks in FGCMP unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of each tank does not exceed, at any time during operation, 40 dynes/cm (2.8x10-3 pound-force per foot)) as measured by a stalagmometer or does not exceed 33 dynes/cm (2.3x10-3 pound-force per foot) as measured by a tensiometer. **(R 336.1910, 40 CFR Part 63.342 (d)(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any tank in FGCMP unless the composite mesh pad system with HEPA filter is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1910)**

2. The permittee shall equip and maintain the composite mesh pad system 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 the surface tension of each decorative chrome plating tank in FGCMP 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 stalagmometer or tensiometer as specified in Method 306B of 40 CFR Subpart N. **(R 336.1910, 40 CFR Part 63.343(c)(5))**

2. 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 gauge, from the pressure drop specified by the manufacturer or as 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 on file at the facility and make them available to the Department upon request. **(40 CFR Part 63 Subparts A & N)**

4. The permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection. The permittee shall also record any actions taken to correct the deficiencies found during the inspection. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1910, 40 CFR Part 63 Subparts A & N)**

5. The permittee shall keep records of the surface tension of each decorative chrome plating tank in FGCMP, the amount of chemical fume suppressant added to each tank in FGCHROME1 and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request. **(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 commencement of trial operation of any tank in FGCMP. **(R 336.1201(7)(a))**

2. The 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 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.

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. SVCMP	12	28	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart WWWWWW, as they apply to EUCHROMEETCH. **(40 CFR Part 63, Subpart A & WWWWWW)**

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