

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

July 9, 2020

PERMIT TO INSTALL
40-20

ISSUED TO
DCI Aerotech, Inc.

LOCATED AT
7515 Lyndon Avenue
Detroit, Michigan 48238

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
A8831

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: June 14, 2020	
DATE PERMIT TO INSTALL APPROVED: July 9, 2020	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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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 ₂ 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 ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	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 ₂	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 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 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
EULINE1	Plating line consisting of 20 process tanks and approximately 30 total tanks. There are several tanks associated with cleaning and surface preparation, including acid and rinse tanks. There is also one Woods nickel strike tank, one nickel activator/strike bath, electroless nickel tanks, and nickel sulfamate tanks. Eleven tanks are controlled by Exhaust System #1 (ES#1, Packed Bed Scrubber and Mist Eliminator #1), six tanks are controlled by Exhaust System #2 (ES#2, Packed Bed Scrubber and Mist Eliminator #2), and three tanks are uncontrolled.	TBD	
EULINE2	Plating line consisting of 17 process tanks and approximately 27 total tanks. There are several tanks associated with cleaning and surface preparation, including acid and rinse tanks. There are also two Woods nickel strike tanks, one nickel sulfamate tank, one copper strike tank, three bronze plating tanks, three copper plating tanks, and one anti-tarnish tank. Three tanks are controlled by ES#1, five tanks are controlled by ES#2, eight tanks are controlled by Exhaust System #3 (ES#3, Composite Mesh Pad and Packed Bed Scrubber), and one tank is uncontrolled.	TBD	
EULINE3	Plating line consisting of 14 process tanks and approximately 21 total tanks. This line consists of one Woods nickel strike tank; zinc, cadmium, and titanium cadmium plating tanks; as well as chromium conversion coating tanks and several color dip tanks. Three tanks are controlled by ES#2, six tanks are controlled by ES#3, and six tanks are uncontrolled.	TBD	
EU6-2	One cyanide waste tank controlled by Exhaust System #4 (ES#4, Packed bed and mist eliminator)	TBD	FGMISCTANKS
EU6-3	One cyanide waste tank controlled by ES#4	TBD	FGMISCTANKS
EU6-4	One chrome strip tank controlled by ES#4.	TBD	FGMISCTANKS
EU6-5	One High Velocity Oxygen Fuel Thermal Spray Process (HVOF) strip tank. This tank is uncontrolled.	TBD	

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.

EULINE1

EMISSION UNIT CONDITIONS

DESCRIPTION

Plating line consisting of 20 process tanks and approximately 30 total tanks. There are several tanks associated with cleaning and surface preparation, including acid and rinse tanks. There is also one Woods nickel strike tank, one nickel activator/strike bath, electroless nickel tanks, and nickel sulfamate tanks. Eleven tanks are controlled by Exhaust System #1 (ES#1, Packed Bed Scrubber and Mist Eliminator #1), six tanks are controlled by Exhaust System #2 (ES#2, Packed Bed Scrubber and Mist Eliminator #2), and three tanks are uncontrolled.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Eleven tanks (Tanks 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, and 30) are controlled by Exhaust System #1 (Packed Bed Scrubber and Mist Eliminator #1). Six (Tanks 4, 5, 7, 11, 13, and 15) are controlled by Exhaust System #2 (Packed Bed Scrubber and Mist Eliminator #2). All other tanks are uncontrolled and exhausted to the general in-plant environment.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any tank in EULINE1 exhausted to a control device unless a malfunction abatement plan (MAP) as described in Rule 911(2), for ES#1 and ES#2, has been submitted within 90 days of trial operation of EULINE1 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)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any tank in EULINE1 exhausted to a control device unless the respective control device is installed, operating, and maintained in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining the pressure drop and a scrubber solution pH for each scrubber system according to the MAP. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall equip and maintain each wet scrubber system associated with EULINE1 with a device to monitor pressure drop on a continuous basis and a device to monitor scrubber solution pH on a continuous basis. **(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 perform inspections of each scrubber system associated with EULINE1 as follows: **(R 336.1224, R 336.1225, R 336.1910)**
 - a) Determine pressure drop across each scrubber system on a daily basis when in operation. If the pressure drop across the control varies by more than the recommended range as specified by the MAP, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b) Visually inspect the scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on the packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - c) Visually inspect ductwork from tanks to the scrubber, on a quarterly basis, to ensure there are no leaks.
 - d) Perform all maintenance on each scrubber system in accordance with the MAP.
2. The permittee shall keep daily records of the pressure drop and the scrubber solution pH for ES#1 and ES#2, each separately, when in operation, and shall keep records of all operating and maintenance information 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 EULINE1. **(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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVES#1	40	36.33	40 CFR 52.21(c) & (d)
2. SVES#2	40	36.33	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 WWWWWW for Air Source Standards for Plating and Polishing Operations as they apply to EULINE1. **(40 CFR Part 63, Subpart A and Subpart WWWWWW)**
2. Within 30 days of trial operation, the permittee shall label all tanks in EULINE1 in a manner acceptable to the AQD District Supervisor.¹ **(R 336.1224, R 336.1225)**

Footnotes:

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

EULINE2 EMISSION UNIT CONDITIONS

DESCRIPTION

Plating line consisting of 17 process tanks and approximately 27 total tanks. There are several tanks associated with cleaning and surface preparation, including acid and rinse tanks. There are also two Woods nickel strike tanks, one nickel sulfamate tank, one copper strike tank, three bronze plating tanks, three copper plating tanks, and one anti-tarnish tank. Three tanks are controlled by ES#1, five tanks are controlled by ES#2, eight tanks are controlled by Exhaust System #3 (ES#3, Composite Mesh Pad and Packed Bed Scrubber), and one tank is uncontrolled.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Tanks 4, 5, and 7 are controlled by Exhaust System #1 (Packed Bed Scrubber and Mist Eliminator #1). Tanks 11, 13, 15, 17, and 26 are controlled by Exhaust System #2 (Packed Bed Scrubber and Mist Eliminator #2). Tanks 9, 19, 20, 21, 22, 23, 24, and 25 are controlled by Exhaust System #3 (Composite Mesh Pad and Packed Bed Scrubber). All other tanks are uncontrolled and exhausted to the general in-plant environment.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any tank in EULINE2 exhausted to a control device unless a malfunction abatement plan (MAP) as described in Rule 911(2), for ES#1, ES#2, and ES#3, has been submitted within 90 days of trial operation of EULINE2, 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)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any tank in EULINE2 exhausted to a control device unless the respective control device is installed, operating, and maintained in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining a pressure drop and scrubber solution pH for each scrubber system according to the MAP. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall equip and maintain each scrubber system associated with EULINE2 with a device to monitor pressure drop on a continuous basis and a device to monitor scrubber solution pH on a continuous basis. **(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 perform inspections of each scrubber system associated with EULINE2 as follows: **(R 336.1224, R 336.1225, R 336.1910)**
 - a) Determine pressure drop across each wet scrubber system on a daily basis when in operation. If the pressure drop across the control varies by more than the recommended range as specified by the MAP, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b) Visually inspect the scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on the packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - c) Visually inspect ductwork from tanks to the scrubber, on a quarterly basis, to ensure there are no leaks.
 - d) Perform all maintenance on each scrubber system in accordance with the MAP.
2. The permittee shall keep a daily record of the pressure drop and scrubber solution pH for ES#1, ES#2, and ES#3, each separately, when in operation and shall keep records of all operating and maintenance information 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 EULINE2. **(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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVES#1	40	36.33	40 CFR 52.21(c) & (d)
2. SVES#2	40	36.33	40 CFR 52.21(c) & (d)
3. SVES#3	52	34.25	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 WWWWWW for Air Source Standards for Plating and Polishing Operations as they apply to EULINE2. **(40 CFR Part 63, Subpart A and Subpart WWWWWW)**
2. Within 30 days of trial operation, the permittee shall label all tanks in EULINE2 in a manner acceptable to the AQD District Supervisor.¹ **(R 336.1224, R 336.1225)**

Footnotes:

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

EULINE3 EMISSION UNIT CONDITIONS

DESCRIPTION

Plating line consisting of 14 process tanks and approximately 21 total tanks. This line consists of one Woods nickel strike tank; zinc, cadmium, and titanium cadmium plating tanks; as well as chromium conversion coating tanks and several color dip tanks. Three tanks are controlled by ES#2, six tanks are controlled by ES#3, and six tanks are uncontrolled.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Tanks 3, 6, and 8 are controlled by Exhaust System #2 (Packed Bed Scrubber and Mist Eliminator #2). Tanks 10, 11, 13, 15, 17, and 21 are controlled by Exhaust System #3 (Composite Mesh Pad and Packed Bed Scrubber). All other tanks are uncontrolled and exhausted to the general in-plant environment.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any tank in EULINE3 exhausted to a control device unless a malfunction abatement plan (MAP) as described in Rule 911(2), for ES#2 and ES#3, has been submitted within 90 days of trial operation of EULINE3, 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)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any tank in EULINE3 exhausted to a control device unless the respective control device is installed, operating, and maintained in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining the pressure drop and scrubber solution pH for each scrubber system according to the MAP. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall equip and maintain each scrubber system associated with EULINE3 with a device to monitor pressure drop on a continuous basis and a device to monitor scrubber solution pH on a continuous basis. **(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 perform inspections of each scrubber system associated with EULINE3 as follows: **(R 336.1224, R 336.1225, R 336.1910)**
 - a) Determine pressure drop across each scrubber system on a daily basis when in operation. If the pressure drop across the control varies by more than the recommended range as specified by the MAP, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b) Visually inspect the scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on the packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - c) Visually inspect ductwork from tanks to the scrubber, on a quarterly basis, to ensure there are no leaks.
 - d) Perform all maintenance on each scrubber system in accordance with the MAP.
2. The permittee shall keep a daily record of the pressure drop and scrubber solution pH for ES#2 and ES#3, each separately, when in operation and shall keep records of all operating and maintenance information 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 EULINE3. **(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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVES#2	40	36.33	40 CFR 52.21(c) & (d)
2. SVES#3	52	34.25	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 WWWWWW for Air Source Standards for Plating and Polishing Operations as they apply to EULINE3. **(40 CFR Part 63, Subpart A and Subpart WWWWWW)**
2. Within 30 days of trial operation, the permittee shall label all tanks in EULINE3 in a manner acceptable to the AQD District Supervisor.¹ **(R 336.1224, R 336.1225)**

Footnotes:

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

EU6-5 EMISSION UNIT CONDITIONS

DESCRIPTION

A strip tank for the removal of High Velocity Oxygen Fuel Thermal Spray Process (HVOF) coatings. This tank is uncontrolled.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

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 EU6-5. (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:

NA

IX. OTHER REQUIREMENT(S)

1. Within 30 days of trial operation, the permittee shall label tank EU6-5 in a manner acceptable to the AQD District Supervisor.¹ **(R 336.1224, R 336.1225)**

Footnotes:

¹ 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.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGMISCTANKS	Two cyanide waste tanks and one chrome strip tank. All tanks are controlled by Exhaust System #4 (ES#4, packed bed scrubber and mist eliminators).	EU6-2, EU6-3, EU6-4

FGMISCTANKS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two cyanide waste tanks and one chrome strip tank. All tanks are controlled by Exhaust System #4 (ES#4, packed bed scrubber and mist eliminators).

Emission Unit: EU6-2, EU6-3, EU6-4

POLLUTION CONTROL EQUIPMENT

Exhaust System #4 (Packed Bed Scrubber and Mist Eliminator)

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any tank in FGMISCTANKS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for ES#4, has been submitted within 90 days of trial operation of FGMISCTANKS, 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)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any tank in FGMISCTANKS unless ES#4 is installed, operating, and maintained in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining a pressure drop and scrubber solution pH for ES#4 according to the MAP. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall equip and maintain ES#4 with a device to monitor pressure drop on a continuous basis and a device to monitor scrubber solution pH on a continuous basis. **(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 perform inspections on ES#4 as follows: **(R 336.1224, R 336.1225, R 336.1910)**
 - a) Determine pressure drop across the scrubber system on a daily basis when in operation. If the pressure drop across the control varies by more than the recommended range as specified by the MAP, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b) Visually inspect the scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on the packed beds, and no evidence of chemical attack on the structural integrity of the control device.
 - c) Visually inspect ductwork from tanks to the scrubber, on a quarterly basis, to ensure there are no leaks.
 - d) Perform all maintenance on each scrubber system in accordance with the MAP.
2. The permittee shall keep a daily record of the pressure drop and scrubber solution pH for ES#4 when in operation and shall keep records of all operating and maintenance information 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 FGMISCTANKS. **(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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVES#4	30	30	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 WWWW for Air Source Standards for Plating and Polishing Operations as they apply to FGMISCTANKS. **(40 CFR Part 63, Subpart A and Subpart WWWW)**
2. Within 30 days of trial operation, the permittee shall label all tanks in FGMISCTANKS in a manner acceptable to the AQD District Supervisor.¹ **(R 336.1224, R 336.1225)**

Footnotes:

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