

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

November 1, 2017

**PERMIT TO INSTALL**  
292-01B

**ISSUED TO**  
Mold-Tech Michigan

**LOCATED AT**  
34497 Kelly Road  
Fraser, Michigan

**IN THE COUNTY OF**  
Macomb

**STATE REGISTRATION NUMBER**  
N7039

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:

**October 4, 2017**

DATE PERMIT TO INSTALL APPROVED:

**November 1, 2017**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

## PERMIT TO INSTALL

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**Common Abbreviations / Acronyms**

| <b>Common Acronyms</b>    |  | <b>Pollutant / Measurement Abbreviations</b> |   |
|---------------------------|--|--|---|
| 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 <sub>2e</sub>                             | Carbon Dioxide Equivalent   |
| CFR                       | Code of Federal Regulations                                | dscf   | Dry standard cubic foot   |
| COM                       | Continuous Opacity Monitoring                              | dscm   | Dry standard cubic meter  |
| Department/<br>department | Michigan Department of Environmental<br>Quality            | °F   | Degrees Fahrenheit  |
| EU                        | Emission Unit  | gr   | Grains  |
| FG                        | Flexible Group   | HAP  | Hazardous Air Pollutant   |
| GACS                      | Gallons of Applied Coating Solids                          | Hg   | Mercury   |
| GC                        | General Condition  | hr   | Hour  |
| GHGs                      | Greenhouse Gases   | HP   | Horsepower  |
| HVLP                      | High Volume Low Pressure*                                  | H <sub>2</sub> S                             | Hydrogen Sulfide  |
| ID                        | Identification   | kW   | Kilowatt  |
| IRSL                      | Initial Risk Screening Level                               | lb   | Pound   |
| ITSL                      | Initial Threshold Screening Level                          | m  | Meter   |
| LAER                      | Lowest Achievable Emission Rate                            | mg   | Milligram   |
| MACT                      | Maximum Achievable Control Technology                      | mm   | Millimeter  |
| MAERS                     | Michigan Air Emissions Reporting System                    | MM   | Million   |
| MAP                       | Malfuction Abatement Plan                                  | MW   | Megawatts   |
| MDEQ                      | Michigan Department of Environmental<br>Quality            | NMOC   | Non-methane Organic Compounds                                       |
| MSDS                      | Material Safety Data Sheet                                 | NO <sub>x</sub>                              | Oxides of Nitrogen  |
| NA                        | Not Applicable   | ng   | Nanogram  |
| NAAQS                     | National Ambient Air Quality Standards                     | PM   | Particulate Matter  |
| NESHAP                    | National Emission Standard for<br>Hazardous Air Pollutants | PM <sub>10</sub>                             | Particulate Matter equal to or less than 10<br>microns in diameter  |
| NSPS                      | New Source Performance Standards                           | PM <sub>2.5</sub>                            | Particulate Matter equal to or less than 2.5<br>microns in diameter |
| NSR                       | New Source Review  | pph  | Pounds per hour   |
| PS                        | Performance Specification                                  | ppm  | Parts per million   |
| PSD                       | Prevention of Significant Deterioration                    | ppmv   | Parts per million by volume   |
| PTE                       | Permanent Total Enclosure                                  | ppmw   | Parts per million by weight   |
| PTI                       | Permit to Install  | psia   | Pounds per square inch absolute                                     |
| RACT                      | Reasonable Available Control Technology                    | psig   | Pounds per square inch gauge  |
| ROP                       | Renewable Operating Permit                                 | scf  | Standard cubic feet   |
| SC                        | Special Condition  | sec  | Seconds   |
| SCR                       | Selective Catalytic Reduction                              | SO <sub>2</sub>                              | Sulfur Dioxide  |
| SNCR                      | Selective Non-Catalytic Reduction                          | TAC  | Toxic Air Contaminant   |
| SRN                       | State Registration Number                                  | Temp   | Temperature   |
| TEQ                       | Toxicity Equivalence Quotient                              | THC  | Total Hydrocarbons  |
| USEPA/EPA                 | United States Environmental Protection<br>Agency           | tpy  | Tons per year   |
| VE                        | Visible Emissions  | µg   | Microgram   |
|                           |  | µm   | Micrometer or Micron  |
|                           |  | 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, 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.

| <b>Emission Unit ID</b> | <b>Emission Unit Description<br/>(Process Equipment &amp; Control Devices)</b>              | <b>Installation Date /<br/>Modification Date</b> | <b>Flexible Group ID</b>  |
|-------------------------|---|--|---------------------------|
| EUMOLDTECH              | Nitric acid etching line with packed bed scrubber for control                               | July 15, 2003 / NA                               | FGMOLDCOAT,<br>FGFACILITY |
| EUTRIBOCOAT             | Electroless nickel plating line with packed bed scrubber for control                        | July 15, 2003 / NA                               | FGMOLDCOAT,<br>FGFACILITY |
| EUNICKELSTRIKE          | Nickel electroplating line consisting of nine tanks. Controlled by the packed bed scrubber. | TBD / NA   | FGFACILITY                |

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.

**The following conditions apply to: EUMOLDTECH**

**DESCRIPTION:** Nitric acid etching line with packed bed scrubber for control

**Flexible Group ID:** FGMOLDCOAT, FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** Packed Bed Scrubber

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not etch more than 650 square feet of surface area per day in EUMOLDTECH based upon a 24-hour rolling time period as determined at the end of each calendar day.<sup>1</sup> **(R 336.1224, R 336.1225)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

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))

1. The permittee shall keep, in a satisfactory manner, records of the amount of surface area etched on a daily basis. All records are shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>1</sup> (R 336.1224, R 336.1225)

**VII. REPORTING**

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:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/ Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|--|---|---|
| 1. SVSCRUBBER              | 50   | 38  | R 336.1225,<br>40 CFR 52.21(c) &(d)       |

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**The following conditions apply to: EUTRIBOCOAT**

**DESCRIPTION:** Electroless nickel plating line with packed bed scrubber for control.

**Flexible Group ID:** FGMOLDCOAT, FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** Packed Bed Scrubber

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not coat more than 2,850 square feet of surface area per day in EUTRIBOCOAT based upon a 24-hour rolling time period as determined at the end of each calendar day.<sup>1</sup> **(R 336.1224, R 336.1225)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

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))**

1. The permittee shall keep, in a satisfactory manner, records of the amount of surface area coated on a daily basis. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>1</sup> **(R 336.1224, R 336.1225)**

**VII. REPORTING**

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:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/ Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|--|---|---|
| 1. SVSCRUBBER              | 50   | 38  | R 336.1225,<br>40 CFR 52.21(c) &(d)       |

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**The following conditions apply to: EUNICKELSTRIKE**

**DESCRIPTION:** Nickel electroplating line consisting of nine tanks. Controlled by the packed bed scrubber.

**Flexible Group ID:** FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** Packed Bed Scrubber

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUNICKELSTRIKE unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the packed bed scrubber system, has been submitted within 60 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 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUNICKELSTRIKE unless the packed-bed scrubber system with mist eliminator is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining a minimum scrubber liquid pH level of 10.0, and a scrubber liquid flow rate and differential pressure across the scrubber in accordance with the manufacturer's specifications. **(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 device to monitor and record the scrubber pH level and flow rate, and the differential pressure across the scrubber on a daily basis. **(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 that controls EUNICKELSTRIKE as follows:
  - a. Determine the pressure drop across the packed bed scrubber system on a daily basis during tank operation. If the pressure drop across the control varies by more than what is 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 each packed bed scrubber system, on a quarterly basis, to ensure there is proper drainage, no build up, and no evidence of chemical attack on the structural integrity of the control device.
  - c. Visually inspect ductwork from the tanks to each packed bed scrubber system, on a quarterly basis, to ensure there are no leaks.
  - d. Perform all maintenance on each packed bed scrubber system in accordance with manufacturer's recommendations.

The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1910)**

2. The permittee shall keep daily records of the scrubber liquid pH level and flow rate, the pressure drop across the scrubber, and records of all operating and maintenance information as required in SC VI.1 for the packed bed scrubber that controls EUNICKELSTRIKE. 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 EUNICKELSTRIKE. **(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:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/ Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|--|---|---|
| 1. SVSCRUBBER              | 50   | 38  | R 336.1225,<br>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 as specified in 40 CFR Part 63 Subparts A and WWWWWW, as they apply to EUNICKELSTRIKE.  
**(40 CFR Part 63 Subparts A & WWWWWW)**

**Footnotes:**

<sup>1</sup>This 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 |
|-------------------|--|------------------------------|
| FGMOLDCOAT        | Nickel acid etching line and electroless nickel plating line controlled by a common packed bed scrubber.                       | EUMOLDTECH,<br>EUTRIBOCOAT   |
| FGFACILITY        | All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. |                              |

**The following conditions apply Source-Wide to: FGMOLDCOAT**

**DESCRIPTION:** Nickel acid etching line and electroless nickel plating line controlled by a common packed bed scrubber.

**Emission Units:** EUMOLDTECH, EUTRIBOCOAT

**POLLUTION CONTROL EQUIPMENT:** Packed Bed Scrubber

**I. EMISSION LIMITS**

| Pollutant          | Limit      | Time Period / Operating Scenario   | Equipment  | Testing / Monitoring Method | Underlying Applicable Requirements |
|--------------------|------------|--|------------|-----------------------------|------------------------------------|
| 1. Ammonia         | 0.30 lb/hr | 24-hour average as determined at the end of each calendar day                | FGMOLDCOAT | SC VI.2                     | R 336.1224,<br>R 336.1225          |
| 2. Ferric Chloride | 0.40 lb/hr | Hourly   | FGMOLDCOAT | SC VI.2                     | R 336.1224,<br>R 336.1225          |
| 3. Nickel          | 184 lb/yr  | 12-month rolling time period as determined at the end of each calendar month | FGMOLDCOAT | SC VI.2                     | R 336.1224,<br>R 336.1225          |
| 4. Nitric Acid     | 0.23 lb/hr | Hourly   | FGMOLDCOAT | SC VI.2                     | R 336.1224,<br>R 336.1225          |

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FGMOLDCOAT unless the packed bed scrubber with mist eliminator is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining a water flow rate through the scrubber as specified by the manufacturer. **(R 336.1224, R 336.1225, R 336.1910)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

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))

1. The permittee shall perform inspections of the packed bed scrubber system that controls FGMOLDCOAT 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  $\pm 2$  inches of water gauge, from the pressure drop determined during compliance testing, the variation shall be documented, and the operation and maintenance procedures shall be reviewed. Any corrective action shall be documented.
  - b. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no contaminant 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 air contaminants.
  - d. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
  - e. Monitor the liquor flow rate through the scrubber on a continuous basis during FGMOLDCOAT operation.
2. The permittee shall maintain daily and quarterly records of inspections of the packed bed fume scrubber that controls FGMOLDCOAT. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1910)

**VII. REPORTING**

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. SVSCRUBBER   | 50  | 38                                 | R 336.1225,<br>40 CFR 52.21(c) &(d) |

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply Source-Wide to: FGFACILITY**

**DESCRIPTION:** Nickel acid etching line and electroless nickel plating line controlled by a common packed bed scrubber.

**POLLUTION CONTROL EQUIPMENT:** Packed Bed Scrubber with Mist Eliminator

**I. EMISSION LIMITS**

| <b>Pollutant</b>       | <b>Limit</b>       | <b>Time Period / Operating Scenario</b>                                      | <b>Equipment</b> | <b>Testing / Monitoring Method</b> | <b>Underlying Applicable Requirements</b> |
|------------------------|--------------------|--|------------------|------------------------------------|---|
| 1. Each Individual HAP | Less than 9.0 tpy  | 12-month rolling time period as determined at the end of each calendar month | FGFACILITY       | SC VI.2                            | R 336.1205(3)                             |
| 2. Aggregate HAPs      | Less than 22.5 tpy | 12-month rolling time period as determined at the end of each calendar month | FGFACILITY       | SC VI.2                            | R 336.1205(3)                             |

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

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

1. The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(3))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**

2. The permittee shall keep the following information on a monthly basis for FGFACILITY:
  - a. Gallons or pounds of each HAP containing material used.
  - b. Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
  - d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance or an alternate method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA