

SUPPLEMENT to PERMIT No. 222-01
Maximum Plating
Detroit, Michigan
November 19, 2001

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, 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, reconstruction, relocation, or alteration 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 person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration 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. The written request 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 owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this

- rule, to the District Supervisor, Air Quality Division. The notice shall be provided no 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 District Supervisor within 30 days, with the information required in this rule. [R 336.1912]
8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 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 Act 451, PA 1994, 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, a person 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. Except as allowed by Rule 285 (a), (b), and (c), permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. [R 336.1201(1)]
 14. 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 Identification

Emission Unit	Emission Unit Description	Stack ID
EUCHROME1	4 hard chrome electroplating tanks with three mist eliminators and a three stage composite mesh pad scrubber with a hepa filter for control.	SV1

The following conditions apply to: EUCHROME1

Emission Limits

Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirements
1.1a Hexavalent chromium	EUCHROME1	0.0053 milligram per dry standard cubic meter, corrected to 70°F and 29.92 inches Hg	Testing Protocol	Special Condition No. 1.7	R336.1224, R336.1225, R336.1941 40 CFR Part 63 Subpart N

Equipment

- 1.2 The permittee shall not operate EUCHROME1 unless the three mist eliminators and the three stage composite mesh pad scrubber with a hepa filter are installed, maintained, and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1941, 40 CFR Part 63 Subpart N]**
- 1.3 The permittee shall equip and maintain the three stage composite mesh pad scrubber with a differential pressure monitoring device. **[R336.1224, R336.1225, R336.1910, R336.1941, 40 CFR 63.343(c)]**

Process/Operational Limits

- 1.4 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. The plan shall contain all information required by 40 CFR 63.342(f)(3)(i), which includes the following: **[R336.1224, R336.1225, R336.1941, 40 CFR Part 63 Subpart N]**
- a) Operation and maintenance criteria for the process equipment, 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.

Monitoring

1.5 The permittee shall perform inspections of the composite mesh pad (CMP) system as follows: **[R336.1224, R336.1225, R336.1910, R336.1941, 40 CFR Part 63 Subpart N]**

- a) Determine pressure drop across the CMP system on a daily basis. If the pressure drop across the control varies by more than ± 1 inch 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 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 are no leaks.
- d) Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there is no breakthrough of chromic acid mist.
- e) Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations.
- f) Visually inspect ductwork from tanks to the control device, on a quarterly basis, to ensure there are no leaks.

1.6 The permittee shall monitor emissions and operating and maintenance information in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) as specified in 40 CFR Part 63, Subparts A and N. **[R336.1941, 40 CFR Part 63 Subpart N]**

Testing

1.7 Within 180 days after the commencement of trial operation, verification of the total chromium emission rate from EUCHROME1 by testing, at owner's expense, in accordance with 40 CFR Part 63, Subparts A and N, will be required. The permittee shall notify the District Supervisor in writing of the intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin, in accordance with 40 CFR 63.347(d). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 63, Appendix A. No less than 60 days prior to testing, a complete stack testing plan must be submitted to the Air Quality Division. The final plan must be approved by the Air Quality Division prior to testing.

Verification of emission rates includes the submittal of a complete report of the test results to the AQD District Supervisor within 90 days following the last day of testing. **[R336.1225, R336.2001, R336.2002, R336.2003, 40 CFR Part 63 Subpart N]**

Recordkeeping/Reporting/Notification

- 1.8 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. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1910, R336.1941, 40 CFR Part 63 Subpart N]**
- 1.9 The permittee shall keep records of emissions and operating and maintenance information to comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) as specified in 40 CFR Part 63, Subparts A and N. All source emissions and operating and maintenance information is for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1941, 40 CFR Part 63 Subpart N]**
- 1.10 The permittee shall submit the following notifications to the Department in accordance with 40 CFR Part 63.347: **[R336.1941, 40 CFR Part 63 Subpart N]**
- a) A notification of the date when construction was commenced shall be submitted no later than 30 calendar days after such date.
 - b) A notification of the actual date of startup of the source shall be submitted within 30 calendar days after such date.
 - c) Notification of compliance status report.
 - d) Ongoing compliance status report.

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirements
1.11	SV1	26	29	R336.1225
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				