



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
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TELE: (614) 644-3020 FAX: (614) 644-2329

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Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
ASHTABULA COUNTY
Application No: 02-21412
Fac ID: 0204020460**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
Subpart N	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 1/31/2006

Lakeside Custom Plating
Tracy McBride
373 Commerce St.
Conneaut, OH 44030

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/31/2006
Effective Date: 1/31/2006**

FINAL PERMIT TO INSTALL 02-21412

Application Number: 02-21412
Facility ID: 0204020460
Permit Fee: **\$400**
Name of Facility: Lakeside Custom Plating
Person to Contact: Tracy McBride
Address: 373 Commerce St.
Conneaut, OH 44030

Location of proposed air contaminant source(s) [emissions unit(s)]:
**373 Commerce St.
Conneaut, Ohio**

Description of proposed emissions unit(s):
Decorative chromium electroplating line.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and

regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this

permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
<i>Chromium emissions:</i>	1.5×10^{-4} (0.00015) tpy
<i>PE:</i>	3.1×10^{-4} (0.00031) tpy

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Decorative chromium electroplating line controlled with wetting agents/fume suppressants. Line includes prep tanks, rinse tanks, one copper plating tank, one nickel plating tank and one chrome plating tank.	OAC rule 3745-31-05(A)(3)	Chromium emissions shall not exceed 1.5×10^{-4} (0.00015) tons per year
	40 CFR Part 63, Subpart N	Particulate emissions shall not exceed 3.1×10^{-4} (0.00031) tons per year
	OAC rule 3745-17-07(A)(1)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart N
	OAC rule 3745-17-11(B)(1)	See Additional Terms and Conditions below
		Visible particulate emissions from the wall vent to the outside shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

2. Additional Terms and Conditions

- 2.a The permittee shall control chromium emissions discharged to the atmosphere by not allowing the surface tension of the electroplating or anodizing bath to exceed 45 dynes per centimeter (3.1×10^{-3} pound-force per foot) at any time during operation of the tank.

B. Operational Restrictions

1. The permittee shall use a chemical fume suppressant that contains a wetting agent to control chromium emissions at all times the emissions unit is in operation.
2. The permittee shall implement the following work practices:
 - a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the chromium electroplating or anodizing tank, including the associated air pollution control device(s) and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions.
 - b. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.
 - c. Determination of whether acceptable operation and maintenance procedures are being used shall be based on the facility records, which shall be made available to the regulating agency (Ohio EPA Northeast District Office) upon request, and which may include, but not be limited to: monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emissions unit. Based on this information, the regulating agency (Ohio EPA Northeast District Office) may require that the permittee make changes to the operation and maintenance plan if that plan:
 - i. does not address a malfunction that has occurred;
 - ii. fails to provide for the operation of the emissions unit, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
 - iii. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control equipment, and/or monitoring equipment as quickly as practicable.
3. The permittee shall prepare an operation and maintenance plan to be implemented no later than the startup of the unit. The plan shall include the following elements:

- a. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device, and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment.
- b. The plan shall incorporate the work practice standards for the add-on air pollution control device and monitoring equipment required to demonstrate compliance with the standard.
- c. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
- d. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control device(s), and process and control system monitoring equipment, and for implementing corrective actions to address any malfunctions.
- e. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs.
- f. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report such actions by phone to the regulating agency (Ohio EPA Northeast District Office) within 2 working days following the actions performed inconsistent with the plan. This verbal report shall be followed by a letter within 7 working days following the event, unless the permittee makes alternative reporting arrangements, in advance, with the Ohio EPA Northeast District Office.
- g. The permittee shall maintain the written operation and maintenance plan on record at the facility; and it shall be made readily available for inspection, at the request of the regulating agency (Ohio EPA Northeast District Office) and for the life of the emissions unit. If the operation and maintenance plan is revised, the permittee shall maintain previous versions of the plan at the facility for a period of five years following each revision; this/these superceded versions of the plan shall also be made available for inspection, if so requested by the regulating agency (Ohio EPA Northeast District Office).
- h. The permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements of 40 CFR 63.342(f)(3).

4. If a stalagmometer or tensiometer is used to measure surface tension of the electroplating or anodizing bath, the permittee shall incorporate the maintenance and operational practices recommended by the manufacturer into the operation and maintenance plan for the instrument. These maintenance and operational practices shall be conducted at least once per quarter, unless a shorter schedule is suggested by the manufacturer.

C. Monitoring and/or Recordkeeping Requirements

1. The surface tension shall be monitored according to the following schedule:
 - a. The surface tension shall be measured once every four hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B of 40 CFR Part 63, Subpart N.
 - b. The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every four hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surfacetension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed is once every 40 hours of tank operation.
 - c. Once an exceedance occurs, as indicated through surface tension monitoring, the original monitoring schedule of once every four hours must be resumed. A subsequent decrease in frequency shall follow the schedule in paragraph (b) above.
 - d. Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every four hours must be resumed, with a decrease in monitoring frequency allowed as in paragraph (b) above.
2. In addition to fulfilling all record keeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the emissions unit, the permittee shall also maintain the following records:
 - a. inspection records for the add-on air pollution control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of this permit have been performed. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection;

- b. records of all maintenance performed on the emissions unit, add-on air pollution control device, and monitoring equipment;
 - c. records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment;
 - d. records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
 - e. other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan;
 - f. test reports documenting results of all performance tests;
 - g. all measurements as may be necessary to determine the conditions of performance tests;
 - h. records of monitoring data that are used to demonstrate compliance with the standard including the date and time the data are collected;
 - i. the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment;
 - j. the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment;
 - k. the total process operating time of the emissions unit during the reporting period;
 - l. all documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit and §63.9 and §63.10 of 40 CFR Part 63, subpart A; and
 - n. records of the date and time that fume suppressants are added to the electroplating or anodizing bath.
- 3.** All records shall be maintained for a period of five years.

D. Reporting Requirements

- 1.** The permittee shall submit a Notification of Compliance Status to the appropriate regulating agency, signed by the responsible official who shall certify its accuracy,

attesting to whether the affected emissions unit is in compliance. The notification shall include the following information for each affected emissions unit:

- a. the applicable emission limitations and the methods that were used to determine compliance with this limitation;
 - b. the test report, documenting the results of the performance test and including the following elements:
 - i. a brief description of the process;
 - ii. the description of the sampling location;
 - iii. the description of sampling and analytical procedures and any modifications to the standard procedures;
 - iv. the test results;
 - v. quality assurance procedures and results;
 - vi. records of operating conditions during the test, preparation of standards, and calibration procedures;
 - vii. raw data sheets for field sampling and field and laboratory analyses; and
 - viii. any other information required by the test method;
 - c. the surface tension measurement and frequency of each measurement during the reporting period;
 - d. for each monitored parameter for which a compliant value was established, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;
 - e. the methods that shall be used to determine continuous compliance;
 - f. a description of the air pollution control method(s) used for each emission point;
 - g. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards; and
 - h. a statement by the owner or operator as to whether the emissions unit is in compliance.
- 2.** The permittee shall prepare and submit annual compliance status reports (unless a more frequent reporting frequency has been determined) to the regulating agency (Ohio EPA Northeast District Office) in order to document the ongoing compliance status of the emissions unit. This report shall include the following:
- a. the company name and address of the emissions unit;

- b. a description of the source, type of process performed, and the air pollution control method and monitoring device(s) that is/are/shall be used to demonstrate continuous compliance;
 - c. an identification of the operating parameter(s) that is/are/shall be monitored for compliance determination;
 - d. the relevant emission limitation for the emissions unit, and the operating parameter value(s), or range of values, established during compliance testing and reported in the Notification of Compliance;
 - e. the beginning and ending dates of the reporting period;
 - f. the total operating time of the emissions unit during the reporting period;
 - g. a summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total emissions unit operating time during that reporting period; and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes; and
 - h. the report shall be completed annually and retained on site, and made available to the regulating agency (Ohio EPA Northeast District Office) upon request.
 3. The permittee, qualifying as an area source, shall submit annual ongoing compliance summary reports, unless both of the following conditions demonstrate that more frequent reporting is required:
 - a. the total duration of excess emissions is one percent or greater of the total operating time for the reporting period; and
 - b. the total duration of malfunctions of the add-on air pollution control device and/or monitoring equipment is 5 percent or greater of the total operating time.
- Once the permittee reports an exceedance or malfunction, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.
4. The regulating agency (Ohio EPA Northeast District Office) may determine on a case-by-case basis if the summary report shall be completed and submitted more frequently than annually, or if the annual report may be retained on site (for inspection upon request) rather than requiring it be submitted.

5. The permittee who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual (or semi-annual if quarterly) and/or may be permitted to maintain the report on site, rather than submit an annual or semi-annual report, if all of the following conditions are met:
 - a. for 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected emissions unit is in compliance with the relevant emission limit;
 - b. the permittee continues to comply with all applicable record keeping and monitoring requirements of 40 CFR Part 63, subpart A and this permit; and
 - c. the regulating agency (Ohio EPA Northeast District Office) does not object to a reduced reporting frequency.

In deciding whether to approve a reduced reporting frequency or to allow the report to be retained on site, the regulating agency (Ohio EPA Northeast District Office) may request to review information concerning the facility's previous performance history during the 5-year record keeping period prior to the intended change in reporting frequency, or the record keeping period since the emissions unit's compliance date, whichever is shorter. Records subject to review include performance test results, monitoring data, and evaluations of the permittee's conformance with emission limitations and work practice standards. If the permittee's request is disapproved, the regulating agency (Ohio EPA Northeast District Office) will notify the permittee in writing within 45 days after receiving notice. This notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

As soon as the monitoring data show that the facility is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannually, and the permittee shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the permittee may again request approval to reduce the reporting frequency.

E. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1 of these Special Terms and Conditions shall be determined in accordance with the following requirements:
 - a. **Emission Limitation:**
The surface tension of the electroplating bath shall not exceed 45 dynes per centimeter.

Applicable Compliance Method:
Compliance may be determined by the monitoring and recordkeeping requirements specified in Section C.1 of this permit.

- b. Emission Limitation:
Chromium emissions shall not exceed 1.5×10^{-4} (0.00015) ton per year

Applicable Compliance Method:
To determine compliance with the annual emission limit, the following equation shall be used:

$$Ea = EF \times 100 \times Rc \times 1/7,000 \times Hr \times 1/2,000$$

where:

- Ea = actual annual chromium emissions in tons per year
- EF = chromium emission factor of 1.2×10^{-6} grains/dscf (taken from AP-42, Section 12.20, Table 12.20-1 for decorative chromium electroplating with fume suppressant)
- 100 = conversion factor for converting grains/dscf to grains/amp-hr
- Rc = rectifier capacity in amps (actual amps used in chromium tank)
- 1/7,000 = 1 pound per 7,000 grains to convert from grain/hr to lbs/hr
- Hr = hours per year of operation of chromium electroplating tank
- 1/2,000 = 1 ton per 2,000 pounds to convert from lbs/yr to ton/yr

If required, compliance shall be determined in accordance with Test Methods 306 or 306A as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- c. Emission Limitation:
Particulate emissions shall not exceed 3.1×10^{-4} (0.00031) ton per year

Applicable Compliance Method:
To determine compliance with the annual emission limit, the following equation shall be used:

$$Ea = EF \times 100 \times Rc \times 1/7,000 \times Hr \times 1/2,000$$

where:

- Ea = actual annual particulate emissions in tons per year
- EF = particulate emission factor of 2.5×10^{-6} grains/dscf (taken from AP-42, Section 12.20, Table 12.20-1 for decorative chromium electroplating with fume suppressant)
- 100 = conversion factor for converting grains/dscf to grains/amp-hr
- Rc = rectifier capacity in amps (total actual amps used in acid/copper, nickel and chromium tanks)
- 1/7,000 = 1 pound per 7,000 grains to convert from grain/hr to lbs/hr
- Hr = hours per year of operation of chromium electroplating tank
- 1/2,000 = 1 ton per 2,000 pounds to convert from lbs/yr to ton/yr

If required, compliance shall be determined in accordance with Test Methods 1-5 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- d. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- 2. The permittee shall conduct, or have conducted, emission testing for this emissions unit, in order to demonstrate compliance with the surface tension limitation contained in this permit:
 - a. Method 306B, "Surface Tension Measurement and Record keeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," shall be used to measure the surface tension of the electroplating and/or anodizing bath.
 - b. The stalagmometer or tensiometer shall be operated such that representative measurements of surface tension from the affected emissions unit are obtained. Verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written accuracy specifications or recommendations for operation and calibration of the system(s).

Lakeside Custom Plating
PTI Application: 02-21412
Issued: 1/31/2006

Facility ID: 0204020460
Emissions Unit ID: P001

- c. A representative from the regulating agency (Ohio EPA Northeast District Office) shall be permitted to witness the measurement(s), upon request.

F. Miscellaneous Requirements

None