

Facility ID: 1318000039 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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[Go to Part II for Emissions Unit P006](#)

[Go to Part II for Emissions Unit P007](#)

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Facility ID: 131800039 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
P005 - Hard Chrome Plating Tank 1 with composite mesh pad system	OAC rule 3745-31-05(A)(3) (PTI 13-3202 issued 6/25/97)	Chromium Emissions shall not exceed 0.0035 tons per year.
	40 CFR Part 63 Subpart N	See Additional Terms and Conditions Section 2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to 40 CFR Part 63 Subpart N.  The emission limitation established by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63 Subpart N.
	OAC rule 3745-17-11(B)	

2. **Additional Terms and Conditions**
  - (a) The permittee shall not allow the concentration of total chromium in the exhaust gas stream discharged from the hard chromium electroplating operation to exceed 0.015 mg/dscm (6.6 e-6 gr/dscf).

**B. Operational Restrictions**

1. 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 Cleveland Division of Air Quality (CDAQ) 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 CDAQ 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.
  2. 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 CDAQ 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 CDAQ.
    - 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 CDAQ 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 CDAQ.
    - 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).
  3. The operation and maintenance plan shall incorporate the following work practice standards for the composite mesh-pad control system; the plan shall provide procedures for:
    - a. quarterly visual inspections of the composite mesh-pad system, to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;
    - b. quarterly visual inspections of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist;
    - c. quarterly visual inspections of the ductwork from tank to the composite mesh-pad system to ensure there are no leaks; and
    - d. wash down of the composite mesh-pads in accordance with the manufacturer's recommendations.
- C. **Monitoring and/or Record Keeping Requirements**
  1. 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

m. records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

All records shall be maintained for a period of five years.

**D. Reporting Requirements**

1. The permittee shall submit a Notification of Performance Test to the appropriate CDAQ at least 60 calendar days before the performance test is scheduled. In the event that the permittee is unable to conduct the performance test as scheduled, the provisions of 63.7(b)(2) of 40 CFR Part 63, subpart A shall apply to the emissions unit.
2. The permittee shall report, to the CDAQ, the results of any performance test conducted within 30 days of completion of such test. Reports of performance test results shall also be submitted in the notification of compliance status report, no later than 90 days following the completion of the performance test.
3. The permittee shall submit a Notification of Compliance Status to the CDAQ, 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. documentation that the actual cumulative rectifier capacity is less than 60 million amp-hr/year, to demonstrate that the facility is a small hard chromium electroplating facility;
  - c. 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;
  - d. the methods that shall be used to determine continuous compliance;
  - e. a description of the air pollution control method(s) used for each emission point;
  - f. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards; and
  - g. a statement by the owner or operator as to whether the emissions unit is in compliance.
4. The permittee shall prepare and submit annual compliance status reports (unless a more frequent reporting frequency has been determined) to the CDAQ 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;
  - h. a certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit;
  - i. if the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit;
  - j. a description of any changes in monitoring, processes, or controls since the last reporting period;
  - k. the date of the report;
  - l. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
  - m. the report shall be completed annually and retained on site, and made available to the CDAQ upon request.
5. 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

6. The CDAQ 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.
7. 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:
- 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;
  - the permittee continues to comply with all applicable record keeping and monitoring requirements of 40 CFR Part 63, subpart A and this permit; and
  - the CDAQ 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 CDAQ 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 CDAQ 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

- Performance test results shall be documented in complete test reports that contain the following information:
  - a brief process description;
  - sampling location description(s);
  - a description of sampling and analytical procedures and any modifications to standard procedures;
  - test results;
  - quality assurance procedures and results;
  - records of operating conditions during testing, preparation of standards, and calibration procedures;
  - raw data sheets for field sampling and field and laboratory analysis;
  - documentation of calculations; and
  - any other information required by the test method.
- Any performance test used to demonstrate compliance shall meet the following requirements:
  - the test methods and procedures identified in this permit shall be used during the performance test;
  - the performance test shall be conducted under representative operating and/or worst-case conditions;
  - the performance test report shall contain all the information required per 40 CFR 63.344(a); and
  - the permittee shall have sufficient data to establish the operating parameter value(s) that corresponds to compliance as required for continuous compliance monitoring.
- The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements, in order to demonstrate compliance with the chromium emission limitation contained in this permit:
  - The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit renewal.
  - The following test method shall be employed to demonstrate compliance:
    - Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations" shall be used to determine the chromium concentration from the electroplating or anodizing tank.
  - The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.7 dscm (60 dscf), respectively.
  - Methods 306 and 306A allow the measurement of either total chromium or hexavalent chromium emissions. Emissions units using chromic acid baths can demonstrate compliance with the emission limits by measuring either the total chromium or hexavalent chromium concentration. Hence, the hexavalent

chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

- c. A minimum of three separate runs of the test method must be conducted in order to demonstrate compliance. All applicable requirements of 63.7 of 40 CFR Part 63, subpart A must also be met.
- d. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CDAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA's refusal to accept the results of the emission test (s).
- e. Personnel from the CDAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- f. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CDAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CDAQ.

4. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

a. Emissions Limitation:

Chromium emissions shall not exceed 0.0035 tons per year

Applicable Compliance Method:

The following equation (based on AP-42 Section 12.20) and emission factors from the most recent emissions testing shall be used to determine compliance with the above emissions limitation:

$$A = (EF) \times (100 \text{ dscf/A-hr}) \times (1 \text{ lb/7000 grains}) \times (1 \text{ ton/2000 lbs}) \times RC \times Hr$$

Where:

A = Actual annual chromium emissions (tons per year)

EF = emission factor for Chrome plating line with Composite Mesh-Pad (3.8 e-6 grains/dscf, or emission factor developed from most recent emissions test)

RC = Rectifier Capacity in amps (A)

Hr = Operating hours per year

b. Emissions Limitation:

Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

c. Emissions Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

F. **Miscellaneous Requirements**

1. None

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Facility ID: 1318000039 Emissions Unit ID: P006 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
- (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
P006 - Hard Chrome Plating Tank 1 with composite mesh pad system	OAC rule 3745-31-05(A)(3) (PTI 13-3202 issued 6/25/97)	Chromium Emissions shall not exceed 0.0035 tons per year.
	40 CFR Part 63 Subpart N	See Additional Terms and Conditions Section 2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to 40 CFR Part 63 Subpart N.  The emission limitation established by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63 Subpart N.
	OAC rule 3745-17-11(B)	

2. **Additional Terms and Conditions**

(a) The permittee shall not allow the concentration of total chromium in the exhaust gas stream discharged from the hard chromium electroplating operation to exceed 0.015 mg/dscm (6.6 e-6 gr/dscf).

**B. Operational Restrictions**

1. 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 Cleveland Division of Air Quality (CDAQ) 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 CDAQ 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.

2. 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 CDAQ 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 CDAQ.

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 CDAQ 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 CDAQ.

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).

3. The operation and maintenance plan shall incorporate the following work practice standards for the composite mesh-pad control system; the plan shall provide procedures for:
  - a. quarterly visual inspections of the composite mesh-pad system, to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;
  - b. quarterly visual inspections of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist;
  - c. quarterly visual inspections of the ductwork from tank to the composite mesh-pad system to ensure there are no leaks; and
  - d. wash down of the composite mesh-pads in accordance with the manufacturer's recommendations.

**C. Monitoring and/or Record Keeping Requirements**

1. 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
  - m. records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

All records shall be maintained for a period of five years.

**D. Reporting Requirements**

1. The permittee shall submit a Notification of Performance Test to the appropriate CDAQ at least 60 calendar days before the performance test is scheduled. In the event that the permittee is unable to conduct the performance test as scheduled, the provisions of 63.7(b)(2) of 40 CFR Part 63, subpart A shall apply to the emissions unit.
2. The permittee shall report, to the CDAQ, the results of any performance test conducted within 30 days of completion of such test. Reports of performance test results shall also be submitted in the notification of compliance status report, no later than 90 days following the completion of the performance test.
3. The permittee shall submit a Notification of Compliance Status to the CDAQ, 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. documentation that the actual cumulative rectifier capacity is less than 60 million amp-hr/year, to demonstrate that the facility is a small hard chromium electroplating facility;
  - c. 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;
  - d. the methods that shall be used to determine continuous compliance;
  - e. a description of the air pollution control method(s) used for each emission point;
  - f. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards; and
  - g. a statement by the owner or operator as to whether the emissions unit is in compliance.
4. The permittee shall prepare and submit annual compliance status reports (unless a more frequent reporting frequency has been determined) to the CDAQ 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;
  - h. a certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit;
  - i. if the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit;
  - j. a description of any changes in monitoring, processes, or controls since the last reporting period;
  - k. the date of the report;
  - l. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
  - m. the report shall be completed annually and retained on site, and made available to the CDAQ upon request.
5. 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
6. The CDAQ 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.
7. 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 CDAQ 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 CDAQ 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 CDAQ 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. Performance test results shall be documented in complete test reports that contain the following information:
  - a. a brief process description;
  - b. sampling location description(s);
  - c. a description of sampling and analytical procedures and any modifications to standard procedures;
  - d. test results;
  - e. quality assurance procedures and results;
  - f. records of operating conditions during testing, preparation of standards, and calibration procedures;
  - g. raw data sheets for field sampling and field and laboratory analysis;
  - h. documentation of calculations; and
  - i. any other information required by the test method.
2. Any performance test used to demonstrate compliance shall meet the following requirements:
  - a. the test methods and procedures identified in this permit shall be used during the performance test;
  - b. the performance test shall be conducted under representative operating and/or worst-case conditions;
  - c. the performance test report shall contain all the information required per 40 CFR 63.344(a); and
  - d. the permittee shall have sufficient data to establish the operating parameter value(s) that corresponds to compliance as required for continuous compliance monitoring.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements, in order to demonstrate compliance with the chromium emission limitation contained in this permit:
  - a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit renewal.
  - b. The following test method shall be employed to demonstrate compliance:
    - (1). Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations" shall be used to determine the chromium concentration from the electroplating or anodizing tank.
  - i. The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.7 dscm (60 dscf), respectively.
  - ii. Methods 306 and 306A allow the measurement of either total chromium or hexavalent chromium emissions. Emissions units using chromic acid baths can demonstrate compliance with the emission limits by measuring either the total chromium or hexavalent chromium concentration. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

c. A minimum of three separate runs of the test method must be conducted in order to demonstrate compliance. All applicable requirements of 63.7 of 40 CFR Part 63, subpart A must also be met.

d. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CDAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA's refusal to accept the results of the emission test (s).

e. Personnel from the CDAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

f. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CDAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CDAQ.

4. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method:
  - a. Emissions Limitation:
 

Chromium emissions shall not exceed 0.0035 tons per year
  - Applicable Compliance Method:

The following equation (based on AP-42 Section 12.20) and emission factors from the most recent emissions testing shall be used to determine compliance with the above emissions limitation:

$$A = (EF) \times (100 \text{ dscf/A-hr}) \times (1 \text{ lb/7000 grains}) \times (1 \text{ ton/2000 lbs}) \times RC \times Hr$$

Where:

- A = Actual annual chromium emissions (tons per year)
- EF = emission factor for Chrome plating line with Composite Mesh-Pad (3.8 e-6 grains/dscf, or emission factor developed from most recent emissions test)
- RC = Rectifier Capacity in amps (A)
- Hr = Operating hours per year
- b. Emissions Limitation:

Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

c. Emissions Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

**F. Miscellaneous Requirements**

1. None

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

**Facility ID: 1318000039 Emissions Unit ID: P007 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
P007 - Hard Chrome Plating Tank 1 with composite mesh pad system	OAC rule 3745-31-05(A)(3) (PTI 13-3202 issued 6/25/97)	Chromium Emissions shall not exceed 0.0035 tons per year.
	40 CFR Part 63 Subpart N	See Additional Terms and Conditions Section 2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.
	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.
		The control measures specified by this rule are less stringent than the control measures established

OAC rule 3745-17-08(B)

pursuant to 40 CFR Part 63 Subpart N.

The emission limitation established by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63 Subpart N.

OAC rule 3745-17-11(B)

**2. Additional Terms and Conditions**

- (a) The permittee shall not allow the concentration of total chromium in the exhaust gas stream discharged from the hard chromium electroplating operation to exceed 0.015 mg/dscm (6.6 e-6 gr/dscf).

**B. Operational Restrictions**

1. 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 Cleveland Division of Air Quality (CDAQ) 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 CDAQ 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.
2. 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 CDAQ 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 CDAQ.
  - 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 CDAQ 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; these superceded versions of the plan shall also be made available for inspection, if so requested by the CDAQ.
  - 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).
3. The operation and maintenance plan shall incorporate the following work practice standards for the composite mesh-pad control system; the plan shall provide procedures for:
  - a. quarterly visual inspections of the composite mesh-pad system, to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;
  - b. quarterly visual inspections of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist;
  - c. quarterly visual inspections of the ductwork from tank to the composite mesh-pad system to ensure there are no leaks; and
  - d. wash down of the composite mesh-pads in accordance with the manufacturer's recommendations.

**C. Monitoring and/or Record Keeping Requirements**

1. 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
  - m. records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

All records shall be maintained for a period of five years.

**D. Reporting Requirements**

1. The permittee shall submit a Notification of Performance Test to the appropriate CDAQ at least 60 calendar days before the performance test is scheduled. In the event that the permittee is unable to conduct the performance test as scheduled, the provisions of 63.7(b)(2) of 40 CFR Part 63, subpart A shall apply to the emissions unit.
2. The permittee shall report, to the CDAQ, the results of any performance test conducted within 30 days of completion of such test. Reports of performance test results shall also be submitted in the notification of compliance status report, no later than 90 days following the completion of the performance test.
3. The permittee shall submit a Notification of Compliance Status to the CDAQ, 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. documentation that the actual cumulative rectifier capacity is less than 60 million amp-hr/year, to demonstrate that the facility is a small hard chromium electroplating facility;
  - c. 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;
  - d. the methods that shall be used to determine continuous compliance;
  - e. a description of the air pollution control method(s) used for each emission point;
  - f. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards; and
  - g. a statement by the owner or operator as to whether the emissions unit is in compliance.
4. The permittee shall prepare and submit annual compliance status reports (unless a more frequent reporting frequency has been determined) to the CDAQ 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;
  - h. a certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit;
  - i. if the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit;
  - j. a description of any changes in monitoring, processes, or controls since the last reporting period;
  - k. the date of the report;
  - l. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
  - m. the report shall be completed annually and retained on site, and made available to the CDAQ upon request.
- 5. 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
- 6. The CDAQ 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.
- 7. 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 CDAQ 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 CDAQ 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 CDAQ 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. Performance test results shall be documented in complete test reports that contain the following information:
  - a. a brief process description;
  - b. sampling location description(s);
  - c. a description of sampling and analytical procedures and any modifications to standard procedures;
  - d. test results;
  - e. quality assurance procedures and results;
  - f. records of operating conditions during testing, preparation of standards, and calibration procedures;
  - g. raw data sheets for field sampling and field and laboratory analysis;
  - h. documentation of calculations; and
  - i. any other information required by the test method.
- 2. Any performance test used to demonstrate compliance shall meet the following requirements:

- a. the test methods and procedures identified in this permit shall be used during the performance test;
  - b. the performance test shall be conducted under representative operating and/or worst-case conditions;
  - c. the performance test report shall contain all the information required per 40 CFR 63.344(a); and
  - d. the permittee shall have sufficient data to establish the operating parameter value(s) that corresponds to compliance as required for continuous compliance monitoring.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements, in order to demonstrate compliance with the chromium emission limitation contained in this permit:
- a. The emission testing shall be conducted within 3 months after issuance of the permit and within 6 months prior to permit renewal.
  - b. The following test method shall be employed to demonstrate compliance:
    - (1). Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations" shall be used to determine the chromium concentration from the electroplating or anodizing tank.
  - i. The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.7 dscm (60 dscf), respectively.
  - ii. Methods 306 and 306A allow the measurement of either total chromium or hexavalent chromium emissions. Emissions units using chromic acid baths can demonstrate compliance with the emission limits by measuring either the total chromium or hexavalent chromium concentration. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

c. A minimum of three separate runs of the test method must be conducted in order to demonstrate compliance. All applicable requirements of 63.7 of 40 CFR Part 63, subpart A must also be met.

d. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CDAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA's refusal to accept the results of the emission test (s).

e. Personnel from the CDAQ shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

f. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CDAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CDAQ.

4. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

a. Emissions Limitation:

Chromium emissions shall not exceed 0.0035 tons per year

Applicable Compliance Method:

The following equation (based on AP-42 Section 12.20) and emission factors from the most recent emissions testing shall be used to determine compliance with the above emissions limitation:

$$A = (EF) \cdot (100 \text{ dscf/A-hr}) \cdot (1 \text{ lb/7000 grains}) \cdot (1 \text{ ton/2000 lbs}) \cdot RC \cdot Hr$$

Where:

A = Actual annual chromium emissions (tons per year)

EF = emission factor for Chrome plating line with Composite Mesh-Pad (3.8 e-6 grains/dscf, or emission factor developed from most recent emissions test)

RC = Rectifier Capacity in amps (A)

Hr = Operating hours per year

b. Emissions Limitation:

Visible particulate stack emissions shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

c. Emissions Limitation:

Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.

Applicable Compliance Method:

If required by the CDAQ, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

F. **Miscellaneous Requirements**

1. None