Facility ID: 1677010214 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.

Facility ID: 1677010214 Emissions Unit ID: P003 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Six hard chrome electroplating tanks with two mist eliminators	OAC rule 3745-31-05 PTI 16-1618 issued 3/26/97	Particulate emissions (PE) shall not exceed 0.10 pounds per hour and 0.44 ton per year from coatings.
	40 CFR Part 63, Subpart N	See A.2.b below.
	OAC rule 3745-17-07(A)(1)	See A.2.a below.
	OAC rule 3745-17-11(B)	See A.2.c below.

2. **Additional Terms and Conditions**

   (a) Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
   The permittee shall not allow the concentration of total chromium in the exhaust gases discharged to the atmosphere to exceed 0.03 mg/dscm (1.3x10-5 gr/dscf).

   This limitation also applies during startup and shutdown operations, but not during periods of malfunction where work practice standards address and correct any malfunction event.
   The requirements established pursuant to this rule are equivalent to the short term particulate emission limitation included in OAC rule 3745-31-05(A)(3).

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 regulating agency (appropriate Ohio EPA District Office or local air agency) 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 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 regulating agency 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 regulating agency.

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 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.

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 fiber-bed mist eliminator control; the plan shall provide procedures for:

a. quarterly visual inspections of the fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices;

b. quarterly visual inspections of the ductwork from the tank or tanks to the fiber-bed unit to ensure there are no leaks; and

c. washdown of the fiber elements in accordance with manufacturer's recommendations.

4. The standards and limitations that apply to chromic acid baths shall not be met by using a reducing agent to change the form of the chromic from hexavalent to trivalent.

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; and

l. 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; and

m. 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.

2. The permittee shall perform the following monitoring and record keeping requirements in order to demonstrate compliance through the use of the fiber-bed mist eliminator:

a. During the initial performance test, the permittee shall determine the outlet chromium concentration using the methods described in the "Testing Requirements" section of this permit. The pressure drop across the fiber-bed mist eliminator and the pressure drop across the control device installed upstream of the fiber bed to prevent plugging shall be established as a site-specific operating parameters, setting the values that correspond to compliance with the applicable limitation, as established during performance testing.

b. The permittee may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant values the average pressure drop measured over the three test runs of one performance test and accept 2 inch of water column from these values as the compliant ranges.

c. On and after the date on which the initial performance test is required to be completed under 63.7 of 40 CFR Part 63, Subpart A, the permittee shall monitor and record the pressure drop across the fiber-bed mist eliminator and the pressure drop across the control device installed upstream of the fiber bed to prevent plugging once each day that the emissions unit is in operation. To be in compliance, both the fiber-bed mist eliminator and the upstream control device shall be operated within 1 inch of water column of the pressure drop value established during compliance performance testing, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

D. **Reporting Requirements**

1. The permittee shall fulfill all reporting requirement as outlined in 40 CFR part 63 subpart A. These reports shall be made to the appropriate Ohio EPA District Office or local air agency and shall be sent by U.S. mail, fax or by another courier.

a. submittals sent by U.S. mail shall be postmarked on or before the specified date; and

b. submittals sent by other methods shall be received by the appropriate Ohio EPA District Office or local air agency on or before the specified date.

2. The permittee shall submit a Notification of Performance Test to the appropriate Ohio EPA District Office or local air agency at least 60 calendar days before the performance test is scheduled. In the event that the permittee is unable to conduct the performance as scheduled, the provisions of Section 63.7(b)(2) of 40 CFR Part 63, Subpart A apply.

1. The permittee shall submit a Notification of Compliance Status to the appropriate Ohio EPA District Office or local air agency 90 days after the performance test is completed, signed by the responsible official who shall certify its accuracy, attesting to whether the affected emissions unit is in compliance. The notification shall list for each affected emissions unit:

a. the applicable emission limitations and the methods there were used to determine compliance with this limitation;
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;

a. the surface tension measurement and frequency of each measurement during the reporting period;

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 regulating agency 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. the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis;

i. 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;

j. 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;

k. a description of any changes in monitoring, processes, or controls since the last reporting period;

l. the date of the report;

m. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and

n. the report shall be completed annually and retained on site, and made available to the regulating agency 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 regulating agency 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 regulating agency 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 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 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 analyses;

h. documentation of calculations; and

i. any other information required by the test method.

The test plan shall be submitted to the regulating agency at least 60 days before the date the test is scheduled to begin

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 6 months of permit issuance and 6 months of permit expiration.

b. One of the following test methods 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 Ohio EPA regulating agency. 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 regulating agency 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 regulating agency 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 regulating agency.

F. **Miscellaneous Requirements**

1. None