Facility ID: 0857043032 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.

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

Facility ID: 0857043032 Emissions Unit ID: P026 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
hard chromium plating and parts cleaning with emission elimination device (EED) 140-CR2	OAC rule 3745-31-05 (PTI 08-3912)	Application of an emission elimination device ("EED"), an alternative control technology.
	40 CFR Part 63, Subpart N	The permittee shall not allow the concentration of total chromium in the exhaust gases discharged to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter ("mg/dscm") of ventilation air (6.6 x 10^ -06 grains per dry standard cubic foot ["gr/dscf"]).

2. **Additional Terms and Conditions**

   (a) None

B. **Operational Restrictions**

1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any chromium electroplating or anodizing tank, including associated emission elimination devices (EEDs) and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions.

2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.

3. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Regional Air Pollution Control Agency, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emission unit. Based on this information, the Regional Air Pollution Control Agency may require that the permittee make changes to the operation and maintenance plan if that plan:

   a. does not address a malfunction that has occurred;

   b. fails to provide for the operation of the emissions units, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or,

   c. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as possible.

4. The permittee shall follow the operation and maintenance plan submitted on December 16, 1997 (or the most recent acceptable update of this plan). The plan shall include the following elements:

   a. the operation and maintenance criteria for the affected source, the EEDs , and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment;

   b. work practice standards for the EEDs as outlined in the USEPA approval letter dated September 4, 1996, resulting from a submittal required under section 63.342 (f)(3)(c) and section 63.343 (d) of 40 CFR Part 63, Subpart N, for an air pollution control device not listed. These work practice standards shall include the

following:

i. drain the air-inlet (purge air) valves at the end of each day that the tanks are in operation;

ii. perform weekly visual inspections of access door seals and membranes on the EED for integrity;

iii. drain the evacuation units, weekly, into the plating tank or into the rinse tanks (for recycle into the plating tank);

iv. perform monthly visual inspections of membranes for perforations using a light source that adequately illuminates the membrane (e.g., Grainger model No. 6X971 Fluorescent Hand Lamp);

v. perform monthly visual inspections of all clamps for proper operation and replace as needed;

vi. monthly cleaning or replacement of filters on the evacuation unit;
vii. perform quarterly inspections of the evacuation unit and the piping to and from the unit to ensure that there are no leaks and no evidence of chemical attack; and,

viii. replace access door seals, membranes evacuation unit filters, and purge air inlet check valves in accordance with manufacturer's recommendations.

c. procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur;

d. a systematic procedure for identifying malfunctions of process equipment, EEDs, and process and control system monitoring equipment, and for implementing corrective actions to address such 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 malfunctions 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 within 2 working days after the commencing actions inconsistent with the plan (This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Regional Air Pollution Control Agency.);

g. the permittee shall keep the written operation and maintenance plan on record, and it shall be made available for inspection upon request by the Regional Air Pollution Control Agency for the life of the emissions unit (If the operation and maintenance plan is revised, the permittee shall keep previous versions of the plan on record to be made available for inspection, upon request by the Regional Air Pollution Control Agency, for a period of five years after each revision to the plan.); and,

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.

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

1. The permittee shall follow the continuous compliance monitoring program as outlined in the USEPA approval letter of September 4, 1996, including the following:

a. beginning on August 9, 2000, the permittee shall monitor the continued integrity of the EED seals and membranes using the following methods (Compliance monitoring shall occur once each day that the affected source is operating using both of the following methods, unless no evacuation/purge cycle is performed. The absence of the evacuation/purge cycle shall be recorded and only the first method shall be used to determine compliance on that day.);

i. verify the positive pressure on the EED membrane(s) when the electroplating tank is in operation and parts are being plated by inducing an external pressure to the membrane, which should be bulged slightly upward (This can be done by manually tapping the membrane downwards. By inducing external pressure on a segment of membrane, the balance of positive pressure is shifted to other part of the same membrane and/or to the other membrane(s). This should result in a movement at this and/or the other membrane(s) when the system is adequately sealed and the membrane(s) are intact. Absence of such movement or rebound of the membrane indicates lack of adequate seal or lack of membrane integrity.); and when applicable,

ii. verify the presence of negative pressure on the EED membrane(s) during an evacuation/purge cycle (Negative pressure is demonstrated by movement of the membrane(s) toward the electroplating solution. The absence of inward movement of the membrane(s) during evacuation indicates lack of adequate seal or lack of membrane integrity.);

b. beginning on August 9, 2000, the permittee shall record the results of the daily EED integrity testing.

Operation of the emissions unit with the lack of adequate seals or membrane integrity shall constitute noncompliance with the standards.

2. The permittee shall fulfill all record keeping requirements in the General Provisions to 40 CFR Part 63, according to the applicability of Subpart A.

3. The permittee shall maintain the following records:

a. inspection records for the EEDs and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of this permit have taken place (The record can take the form of a checklist and should identify the device inspected, the date of inspection, and any actions taken to correct deficiencies found during the inspection.);

b. records of all maintenance performed on the emissions unit, EEDs, and monitoring equipment;

c. records of the occurrence, duration, and cause (if known) of each malfunction of process, EEDs, 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, including those required in 1.b above, that are used to demonstrate compliance with the standard including the data 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, EEDs, 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, EEDs, or monitoring equipment;

k. the total process operating time of the emissions unit during the reporting period; and,

l. all documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit and sections 63.9 and 63.10 of 40 CFR Part 63, Subpart A.

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

D. **Reporting Requirements**

1. The permittee shall fulfill all reporting requirements as outlined in 40 CFR Part 63, Subpart A. These reports shall be made to the Regional Air Pollution Control 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.

   b. Submittals sent by other methods shall be received by the Regional Air Pollution Control Agency on or before the specified date.

2. The permittee shall submit a Notification of Performance Test to the Regional Air Pollution Control Agency 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 40 CFR Part 63, Subpart A, Section 63.7 (b)(2), shall apply.

3. The permittee shall report to the Regional Air Pollution Control Agency the results of any performance test conducted. The report shall be submitted no later than 90 days following the completion of the performance test.

4. The permittee shall prepare an ongoing compliance status report annually (unless a request to reduce frequency of ongoing compliance status reports has been approved) to the Regional Air Pollution Control Agency 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. an identification of the operating parameter that is monitored for compliance determination;

   c. the relevant emission limitation for the emissions unit, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as determined by the most recent performance test;

   d. a description of the type of process performed in the emissions unit;

   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 known 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 name, title, and signature of the responsible official who is certifying accurracy of the report;

l. the date of the report; and

m. the report shall be completed annually and retained on site, and made available to the Regional Air Pollution Control Agency upon request.

5. The permittee shall submit semiannual reports if the following conditions are met:

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 air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

6. Once the permittee reports an exceedance meeting the criterion in D.5 above, ongoing compliance status reports shall be submitted semiannually.

7. The Regional Air Pollution Control Agency may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the emissions unit.

8. 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 and/or be allowed to maintain the annual report on site once 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 Regional Air Pollution Control Agency does not object to a reduced reporting frequency. The frequency of submitting ongoing compliance status reports may be reduced if the following requirements are met:

i. the permittee notifies the Regional Air Pollution Control Agency in writing of its intentions to make such a change (The Regional Air Pollution Control Agency may review information concerning the facility's previous performance history during the 5-year record keeping period prior to the intended change, 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 Regional Air Pollution Control Agency will notify the permittee in writing within 45 days after receiving notice. In the absence of a notice of disapproval within 45 days, approval is automatically granted.); and,
ii. if monitoring data show that the emissions unit is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, 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.

9. The permittee shall submit a notification of reconstruction as soon as practicable before the resonstruction has commenced to the Regional Air Pollution Control Agency which includes the following:

a. the permittee's name, title, and address;

b. the address (i.e., physical location) or proposed address of the affected emissions units if different from the permittee's;

c. a notification of intention to make any physical or operational changes to an affected emissions unit that may meet or has been determined to meet the criteria for a reconstruction as defined in 40 CR Part 63.2;

d. an identification of 40 CFR Part 63, Subpart N as the basis for the notification;

e. the expected commencement and completion dates of the reconstruction;

f. the anticipated date of the reconstructed unit's initial startup;

g. the type of process operation to be performed (hard or decorative chromium electroplating or chromium anodizing);

h. a description of the air pollution control technique to be used to control emissions, such as preliminary design drawings and design capacity; and,

i. an estimate of emissions based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emissions limits of 40 CFR Part 63, Subpart N. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

10. The permittee shall notify the Regional Air Pollution Control Agency of any daily compliance test record which indicates the lack of adequate seals or membrane integrity. The notification shall include a copy of such record and shall be sent to the Regional Air Pollution Control Agency within 90 days after the test date.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) in this permit shall be determined in accordance with the following method(s):
Emission Limitation:

0.015 mg/dscm (6.6 x 10^6 gr/dscf)

Applicable Compliance Method:

i. Compliance shall be initially demonstrated through a qualitative performance test method as outlined and approved in USEPA's letter of August 9, 1996, addressed to Techmetals, Incorporated, and outlined as follows:

A smoke generating device, capable of generating 500 to 1000 cubic feet of smoke per 20 square feet of tank surface area, shall be placed in a small container. The small container shall be placed on a stable and flat area at the center of the EED. Upon lighting the smoke device, the access door to the tank shall be quickly closed to avoid smoke from escaping. The smoke device shall be allowed to completely burn, filling the space under the EED. Once the area under the EED is filled with smoke, each seal, joint, and membrane of the EED shall be checked, from the outside, for signs of smoke leaking through.

Any observed leaks in the EED shall be considered indications of noncompliance with the Chrome Plating NESHAP.

When all seals, joints, and membranes have been observed, the evacuation unit shall be turned on to remove the smoke from the EED.

After initial performance testing of the emissions unit has been completed, future performance testing of this type shall be completed at the request of the Regional Air Pollution Control Agency.

and:

ii. Compliance shall be demonstrated on a daily basis, on each day the emissions unit is in use, through the testing as described in Section C.1. Should the daily demonstration indicate a lack of an adequate seal, or lack of membrane integrity, the emissions unit shall be considered to be operating in noncompliance with the standard.

2. 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. any other information required by the test method.

3. The permittee may use a performance test to demonstrate compliance if:

   a. the test methods and procedures identified in this permit were used during the performance test;

   b. the performance test was conducted under representative operating conditions;

   c. the performance test report contains the elements of paragraph E.3.a. through E.3.i. in this section; and,

   d. the permittee has sufficient data to establish the operating parameter value that corresponds to compliance as required for continuous compliance monitoring.

F. **Miscellaneous Requirements**

1. None