

2 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations.

3 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

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

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

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

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after

4 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Techmetals, Inc** located in **Montgomery** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P024	Hard chromium plating and parts cleaning with emission elimination device (EED), 170-CR1	*	3745-31-05	Application of alternative control technology, emission elimination device (EED)
			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 mg/dscm (6.6 E-06 gr/dscf) by conducting the qualitative test method approved in the USEPA letter of August 9, 1996. "observed leaks in the EED shall be considered as indications of noncompliance with the Chrome plating NESHAP."

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

P025	Hard chromium plating and parts cleaning with emission elimination device (EED), for research and development, 160-CR1	**	3745-31-05	Application of alternative control technology, emission elimination device (EED)
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* BAT has been determined to be compliance with the applicable OAC rules, MACT requirements for P024 through the use of emission elimination devices to completely enclose the atmosphere over the chrome electroplating tanks.

** BAT has been determined to be compliance with applicable rules and the air Toxics Policy through the use of emission elimination devices to completely enclose the atmosphere over the chrome electroplating tanks.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant

Tons/Year

Chromium

See air emissions summary

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

A. A completed Intent to Test form shall be submitted to the Regional Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.

B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

C. Tests shall be performed for the following source(s) and pollutant(s):

Source

Pollutant(s)

P024 and P025

Chrome

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Regional Air Pollution Control Agency, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this

8 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

CONSTRUCTION COMPLIANCE CERTIFICATION

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

ADDITIONAL SPECIAL TERMS AND CONDITIONS

I. For P024

- A.**
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 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 emission 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

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- c. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
4. The permittee shall prepare an operation and maintenance plan to be implemented upon startup. The plan shall be incorporated by reference into the Title V permit, if and when a Title V permit is required, and 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 (if such a device is used to comply with the emissions limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment; and,
 - b. work practice standards for the EEDs as outlined in the USEPA approval letter dated September 4, 1996, resulting from a submittal required under §63.342(f)(3)(C) and §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);

10 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- v. perform monthly visual inspections of all clamps for proper operation and replace as needed;
- vi. monthly cleaning or replacement of filters on 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;
- viii. replace accessdoor 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 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 within 2 working days after 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 after it is developed to be made available for inspection, upon request, by

11 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

the Regional Air Pollution Control Agency for the life of the emission 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.

B. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall follow the continuous compliance monitoring program as outlined in the USEPA approval letter of September 4, 1996 which includes the following:
 - a. beginning on the date of the initial performance test, Techmetals shall monitor and record the continued integrity of the EED seals and membranes. 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. when the electroplating tank is in operation and parts are being plated, induce an external pressure to the membrane, which should be bulged slightly upward due to the positive pressure existing inside the EED. 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

12 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

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;

ii. presence of negative pressure on the membrane(s) during an evacuation/purge cycle (demonstrated by movement of the membrane toward the electroplating solution), shall be verified and logged daily. Absence of inward movement of the membrane(s) during evacuation indicates lack of adequate seal or lack of membrane integrity.

2. Operation of the affected source with the lack of adequate seals or membrane integrity shall constitute noncompliance with the standards.
3. The permittee shall fulfill all recordkeeping requirements in the General Provisions to 40 CFR Part 63, according to the applicability of subpart A.
4. The permittee also shall maintain the following records:
 - a. inspection records for the add-on air pollution control device, if such a device is used, 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, 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;

13 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- e. other records, which may take the form of checklists, necessary to demonstrate consistence 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 emission unit during the reporting period; and,
 - 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.
5. All records of any monitoring data, test data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original stip-chart recordings for continuous monitoring instrumentation, and all copies required by the permit. Such records may be maintained in computerized form.

14 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

C. 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 to the Regional Air Pollution Control Agency an initial notification report that contains the following information:
 - a. the date when construction or reconstruction was commenced, no later than 30 calendar days after such date; and,
 - b. the actual date of startup of the emissions unit within 30 calendar days after such date.
3. 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 as scheduled, the provisions of §63.7(b)(2) of 40 CFR Part 63, subpart A apply.
4. The permittee shall submit a Notification of Compliance Status to the Regional Air Pollution Control Agency ninety 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 that were used to determine compliance with this limitation;

15 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- b. the test report documenting the results of the performance test, which includes the elements required in the Test Requirements section of this permit;
 - 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 will be used to determine continuous compliance;
 - e. a description of the air pollution control technique 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.
5. 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, and shall be submitted as part of the Notification of Compliance Status report required by this section.
6. 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;

16 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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 specified in the Notification of Compliance Status required by this section;
- 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 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 name, title, and signature of the responsible official who is certifying the accuracy of the report; and

17 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

1. the date of the report.
7. 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.
8. Once the permittee reports an exceedance, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.
9. 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, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the emissions unit.
10. 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 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;

18 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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 emission 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. 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; 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.

19 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

11. The permittee shall submit a notification of construction or reconstruction as soon as practicable before the construction or reconstruction 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 unit if different from the permittee's;
 - c. a notification of intention to construct or 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 CFR 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 construction or reconstruction;
 - f. the anticipated date of (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.

20 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

D. Testing

1. The permittee shall use the approved qualitative test method stated in USEPA letter of August 9, 1996 to conduct an initial performance test.
2. The test plan shall be made available to the Regional Air Pollution Control Agency prior to testing, if requested.
3. 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.
4. The results of the performance testing may be used 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 conditions;

21 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- c. the performance test report contains elements of paragraph D.3.a. through D.3.i; and,
- d. the permittee has sufficient data to establish the operating parameter value that corresponds to compliance as required for continuous compliance monitoring.

II. For P025:

A. Additional Terms and Conditions

1. Because emissions unit, P025, is used for research or laboratory operation as defined in §63.341 (a) of 40 CFR Part 63 Subpart N, 40 CFR Part 63 Subpart N is not applicable to this emissions unit.

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 emission units, the air pollution control techniques, or the control system and process monitoring equipment

22 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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 practicable.
4. The permittee shall prepare an operation and maintenance plan to be implemented upon startup. The plan shall be incorporated by reference into the Title V permit, if and when a Title V permit is required, and 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 (if such a device is used to comply with the emissions limits), 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 §63.342(f)(3)(C) and §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);

23 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- v. perform monthly visual inspections of all clamps for proper operation and replace as needed;
 - vi. monthly cleaning or replacement of filters on 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 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 within 2 working days after 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;

24 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- g. the permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Regional Air Pollution Control Agency for the life of the emission 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 Recordkeeping Requirements

- 1. The permittee shall follow the continuous compliance monitoring program as outlined in the USEPA approval letter of September 4, 1996 which includes the following:
 - a. beginning on the date of the initial performance test, Techmetals shall monitor and record the continued integrity of the EED seals and membranes. 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. When the electroplating tank is in operation and parts are being plated, induce an external pressure to the membrane, which should be bulged slightly upward due to the positive pressure existing inside the EED. 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

25 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

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.

- ii. Presence of negative pressure on the membrane(s) during an evacuation/purge cycle (demonstrated by movement of the membrane toward the electroplating solution), shall be verified and logged daily. Absence of inward movement of the membrane(s) during evacuation indicates lack of adequate seal or lack of membrane integrity.

- 2. Operation of the affected source with the lack of adequate seals or membrane integrity shall constitute noncompliance with the standards.
- 3. The permittee also shall maintain the following records:
 - a. inspection records for the add-on air pollution control device, if such a device is used, 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, 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 consistence with the provisions of the operation and maintenance plan;

26 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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 emission unit during the reporting period; and,
 - l. all documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit.
4. All records of any monitoring data, test data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original stip-chart recordings for continuous monitoring instrumentation, and all copies required by the permit. Such records may be maintained in computerized form.

D. Reporting Requirements

1. The permittee shall submit to the Regional Air Pollution Control Agency an initial notification report that contains the following information:
 - a. the date when construction or reconstruction was

27 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- commenced, no later than 30 calendar days after such date; and,
- b. the actual date of startup of the emissions unit within 30 calendar days after such 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.
 3. The permittee shall submit a Notification of Compliance Status to the Regional Air Pollution Control Agency ninety 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 that were used to determine compliance with this limitation;
 - b. the test report documenting the results of the performance test, which includes the elements required in the Test Requirements section of this permit;
 - 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 will be used to determine continuous compliance;
 - e. a description of the air pollution control technique 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.

28 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

4. 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, and shall be submitted as part of the Notification of Compliance Status report required by this section.
5. 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 specified in the Notification of Compliance Status required by this section;
 - 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 unknown causes;

29 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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 the accuracy of the report; and,
 - l. the date of the report.
6. 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.
7. Once the permittee reports an exceedance, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.
8. 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, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the emissions unit.

30 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

9. 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 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 this permit;
 - 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 emission 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. 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; and,

31 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- 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.
10. The permittee shall submit a notification of construction or reconstruction as soon as practicable before the construction or reconstruction 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 unit if different from the permittee's;
 - c. a notification of intention to construct or make any physical or operational changes to an affected emissions unit;
 - d. the expected commencement and completion dates of the construction or reconstruction;
 - e. the anticipated date of (initial) startup;
 - f. the type of process operation to be performed (hard or decorative chromium electroplating or chromium anodizing);
 - g. a description of the air pollution control technique to be used to control emissions, such as preliminary design drawings and design capacity; and,
 - h. an estimate of emissions based on engineering calculations and vendor information on control device efficiency. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

32 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

E. Testing

1. The permittee shall use the approved qualitative test method stated in USEPA letter of August 9, 1996 to conduct an initial performance test.
2. The test plan shall be made available to the Regional Air Pollution Control Agency prior to testing, if requested.
3. 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.
4. The results of the performance testing may be used 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 conditions;

33 of 33 Pages

Facility Name: **Techmetals, Inc**

Application Number: **08-3912**

Date: **(Date will be entered upon final issuance)**

- c. the performance test report contains elements of paragraph E.3.a. through E.3.i; and,
- d. the permittee has sufficient data to establish the operating parameter value that corresponds to compliance as required for continuous compliance monitoring.