



Environmental  
Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

4/5/2012

Jennifer Ormsby Sevald  
Akron Plating Company, Inc.  
1774 Hackberry Street  
Akron, OH 44301

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1677010109  
Permit Number: P0108992  
Permit Type: Renewal  
County: Summit

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: ARAQMD





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Akron Plating Company, Inc.**

Facility ID:	1677010109
Permit Number:	P0108992
Permit Type:	Renewal
Issued:	4/5/2012
Effective:	4/5/2012
Expiration:	4/5/2022





Division of Air Pollution Control
Permit-to-Install and Operate
for
Akron Plating Company, Inc.

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? ..... 4
3. What records must I keep under this permit? ..... 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
7. What reports must I submit under this permit? ..... 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? ..... 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
15. What happens if a portion of this permit is determined to be invalid? ..... 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions ..... 10
1. P002, Hard Chrome Plating Tank..... 11
2. P003, Decorative Chrome Plating Tank ..... 26



## Authorization

Facility ID: 1677010109  
Application Number(s): A0043093  
Permit Number: P0108992  
Permit Description: PTIO renewal for hard and decorative chromium electroplating tanks.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 4/5/2012  
Effective Date: 4/5/2012  
Expiration Date: 4/5/2022  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Akron Plating Company, Inc.  
1774 Hackberry Street  
Akron, OH 44301

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

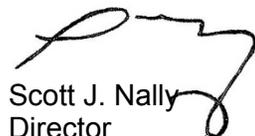
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, OH 44308  
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director

## Authorization (continued)

Permit Number: P0108992

Permit Description: PTIO renewal for hard and decorative chromium electroplating tanks.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**P002**

Hard Chrome Plating Tank  
P0102617  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**P003**

Decorative Chrome Plating Tank  
P0102617  
Not Applicable

## **A. Standard Terms and Conditions**

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

---

<sup>1</sup>Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

## **B. Facility-Wide Terms and Conditions**

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

## **C. Emissions Unit Terms and Conditions**



1. P002, Hard Chrome Plating Tank

Operations, Property and/or Equipment Description:

1000-gallon, hard chromium electroplating tank controlled by a composite mesh pad filter system and a fiber-bed mist eliminator.

a) 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	PE shall not exceed 0.551 lb/hr
c.	40 CFR Part 63, Subpart N (40 CFR 63.340-348)	Total chromium emissions shall not exceed 0.03 mg/dscm (1.3x10 <sup>-5</sup> gr/dscf) [40 CFR 63.342(c)(1)(ii)] See b)(2)a. through b)(2)d.
d.	40 CFR Part 63, Subpart A (40 CFR 63.1-16)	Table 1 to Subpart N of Part 63 lists the applicable General Provisions to Subpart N

## (2) Additional Terms and Conditions

- a. In accordance with 40 CFR 63.340, this emissions unit is an existing, open surface hard chromium electroplating tank located at a small, hard chromium electroplating facility, and is subject to the emissions limitations and control measures specified in this section.
- b. Pursuant to 40 CFR 63.342(c)(3), the permittee may demonstrate the size of a hard chromium electroplating facility through the definitions in 40 CFR 63.341(a). Alternatively, a facility with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more may be considered small if the actual cumulative rectifier capacity is less than 60 million amp-hr/yr as demonstrated by using nonresettable ampere-hr meters and keeping monthly records of actual ampere-hr usage for each 12-month rolling period following the compliance date. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months.
- c. Pursuant to 40 CFR 63.342(b), this emission limitation applies during tank operation (the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank) and during periods of startup and shutdown as these are routine occurrences for the emissions unit.
- d. Pursuant to 40 CFR 63.343(a)(1)(ii), the permittee shall comply with this emissions limitation no later than January 25, 1997.

## c) Operational Restrictions

- (1) Pursuant to 40 CFR 63.342(f)(1), the permittee shall implement the following operation and maintenance 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 devices and monitoring equipment, in a manner consistent with good air pollution control practices; and
  - b. malfunctions shall be corrected as soon as practicable after their occurrence.

Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

- (2) Pursuant to 40 CFR 63.342(f)(2), determination of whether acceptable operation and maintenance procedures are being used shall be based information available to the Administrator (appropriate Ohio EPA district office or local air 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 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:

- a. does not address a malfunction that has occurred;
  - b. 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 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.
- (3) Pursuant to 40 CFR 63.342(f)(3), the permittee shall prepare an operation and maintenance plan to be implemented no later than the applicable compliance date.
- a. The plan shall include the following elements:
    - i. the plan shall specify the operation and maintenance criteria for the emissions unit, 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;
    - ii. the plan shall incorporate the operation and maintenance practices for the add-on air pollution control device or monitoring equipment as identified in Table 1 to 40 CFR 63.342;
    - iii. 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; and
    - iv. the plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment, and for implementing corrective actions to address any malfunctions.
  - b. 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. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
  - c. 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 after commencing actions inconsistent with the plan. This verbal 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 Administrator (appropriate Ohio EPA district office or local air agency).

- d. 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 regulating agency for the life of the emissions unit. If the operation and maintenance plan is revised, the permittee shall keep previous versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the regulating agency for a period of five years after each revision to the plan.
  - e. To meet the operational and maintenance plan requirements, the permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of 40 CFR 63.342(f)(3).
- (4) Pursuant to 40 CFR 63.342(g), the standards that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.
- (5) The permittee shall operate the fiber-bed mist eliminator as well as the composite mesh-pad system at all times when this emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Pursuant to Table 1 of 40 CFR 63.342, the permittee shall implement the following work practice standards for the composite mesh-pad (CMP) system and fiber-bed mist eliminator control techniques:
- a. visually inspect the CMP device at least once per quarter to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;
  - b. visually inspect the back portion of the mesh pad closest to the fan at least once per quarter to ensure there is no breakthrough of chromic acid mist;
  - c. visually inspect the ductwork from tank to CMP control device at least once per quarter to ensure there are no leaks;
  - d. perform washdown of the composite mesh-pads in accordance with the manufacturer's recommendations;
  - e. visually inspect the fiber-bed unit and prefiltering device at least once per quarter 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 device;
  - f. visually inspect the ductwork from tank or tanks to the fiber-bed mist eliminator control device at least once per quarter to ensure there are no leaks; and
  - g. perform washdown of fiber elements in accordance with the manufacturer's recommendations.

- (2) Pursuant to 40 CFR 63.343(c)(1), the permittee shall comply with the following monitoring and recordkeeping requirements in order to demonstrate continuous compliance through the use of a composite mesh-pad (CMP) system:
- a. During the initial performance test, the permittee shall determine the outlet chromium concentration using the test methods and procedures in 40 CFR 63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the CMP system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in 40 CFR 63.344(d)(5).
    - i. Pressure drop across the composite mesh-pad system shall be maintained in a range of  $0.70 \pm 0.30$  inches of water whenever the emissions unit is in operation. This site-specific range was established during the July 2, 1997 initial performance test, which demonstrated the emissions unit at that time to be in compliance with the applicable emissions limitation for total chromium compounds.
    - ii. The permittee may conduct additional performance tests to establish a range of compliant pressure drop values.
    - iii. The requirement to operate a CMP system within the range of compliant pressure drop values does not apply during automatic washdown cycles of the CMP system.
- (3) Pursuant to 40 CFR 63.343(c)(4), the permittee shall comply with the following monitoring and recordkeeping requirements in order to demonstrate continuous compliance through the use of a fiber-bed mist eliminator:
- a. During the initial performance test, the permittee shall determine the outlet chromium concentration using the test methods and procedures in 40 CFR 63.344(c), and shall establish as a site-specific operating parameter 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, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in 40 CFR 63.344(d)(5).
    - i. Pressure drop across the fiber-bed mist eliminator shall be maintained in a range of  $0.23 \pm 0.30$  inches of water whenever the emissions unit is in operation. This site-specific range was established during the July 2, 1997 initial performance test, which demonstrated the emissions unit at that time to be in compliance with the applicable emissions limitation for total chromium compounds.
    - ii. The permittee may conduct additional performance tests to establish a range of compliant pressure drop values.
- (4) Pursuant to 40 CFR 63.344(d), the permittee shall implement the following procedures for site-specific operating parameters:

- a. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the emissions unit are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.
    - i. Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with section 2.2 of Method 2 (40 CFR Part 60, Appendix A).
    - ii. Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications.
- (5) Pursuant to 40 CFR 63.344(d)(5), the permittee shall establish the pressure drop across the add-on air pollution control device in accordance with the following guidelines:
- a. Pressure taps shall be installed at any of the following locations:
    - i. at the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
    - ii. on each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
    - iii. on the front side of the first mesh pad and back side of the last mesh pad within the control system.
  - b. Pressure taps shall be sited at locations that are:
    - i. free from pluggage as possible and away from any flow disturbances such as cyclonic demisters; and
    - ii. situated such that no air infiltration at measurement site will occur that could bias the measurement.
  - c. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
  - d. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
  - e. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
  - f. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

- (6) Pursuant to 40 CFR 63.346(a) and (b), the permittee shall fulfill all of the applicable recordkeeping requirements outlined in 40 CFR Part 63, Subpart A, including 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 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, the 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, 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, 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, or monitoring equipment;
  - k. the total process operating time of the emissions unit during the reporting period;
  - l. records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the permittee is using the actual cumulative rectifier capacity to determine facility size; and
  - m. all documentation supporting the notifications and reports required by 40 CFR 63.9, 63.10, and 63.347.

(7) Pursuant to 40 CFR 63.346(c), all records shall be maintained for a period of five years.

e) Reporting Requirements

(1) Pursuant to 40 CFR 63.347(a), the permittee shall fulfill all reporting requirements as outlined in 40 CFR Part 63, Subparts A and N. Reports required by this permit may be submitted through the Ohio EPA's eBusiness Center:Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency:

- 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) Pursuant to 40 CFR 63.347(c)(1), the permittee shall notify the appropriate Ohio EPA district office or local air agency in writing that the emissions unit is subject to 40 CFR Part 63, Subpart N. The initial notification shall be submitted no later than 180 calendar days after January 25, 1995, and shall contain the following information:

- a. the name, title, and address of the owner or operator;
- b. the address (i.e., physical location) of each emissions unit;
- c. a statement that subpart N of this part is the basis for this notification;
- d. identification of the applicable emission limitation and compliance date for each emissions unit;
- e. a brief description of each emissions unit, including the type of process operation performed;
- f. the maximum potential cumulative potential rectifier capacity;
- g. a statement of whether the emissions unit(s) is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum potential cumulative rectifier capacity;
- h. a statement of whether the owner or operator of the emissions unit will limit the maximum potential cumulative rectifier capacity such that the hard chromium electroplating facility is considered small; and
- i. a statement of whether the emissions unit(s) is located at a major source or an area source as defined in 40 CFR 63.2.

(3) Pursuant to 40 CFR 63.345(b), the permittee shall not reconstruct this emissions unit without submitting a notification of reconstruction to the appropriate Ohio EPA district office or local air agency. This notification of reconstruction shall contain the information identified in 40 CFR 63.345(b)(2) and (3), as appropriate. Reconstruction is subject only to notification and can begin upon submission of a complete notification. In addition, the permittee shall submit all initial notifications as required in 40 CFR 63.347(c)(2).

- (4) Pursuant to 40 CFR 63.347(d), the permittee shall notify the appropriate Ohio EPA district office or local air agency in writing of his or her intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin to allow the regulating agency to have an observer present during the test. In the event that the permittee is unable to conduct the performance as scheduled, the provisions of 40 CFR 63.7(b)(2) apply.
- (5) Pursuant to 40 CFR 63.347(e), the permittee shall submit to the appropriate Ohio EPA district office or local air agency, within 90 calendar days after the performance test is completed, a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the emissions unit is in compliance. The notification shall list for each emissions unit:
- a. the applicable emission limitation and the methods there were used to determine compliance with this limitation;
  - b. the test report documenting the results of the performance test, which contains the following elements:
    - i. a brief process description;
    - ii. sampling location description(s);
    - iii. a description of sampling and analytical procedures and any modifications to the standard procedures;
    - iv. 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;
    - viii. documentation of calculations; and
    - ix. any other information required by the test method;
  - c. the type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm;
  - d. for each monitored parameter for which a compliant value was established, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;
  - e. the methods that will be used to determine continuous compliance;
  - f. a description of the air pollution control technique for each emission point;

- g. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards;
  - h. records to support the facility is small, if determining facility size based on actual cumulative rectifier capacity; and
  - i. a statement by the owner or operator as to whether the emissions unit is in compliance.
- (6) Pursuant to 40 CFR 63.347(h)(1), the permittee shall prepare a summary report to document the ongoing compliance status of the emissions unit. This report shall be completed annually, retained on site, and be made available to the Administrator (appropriate Ohio EPA district office or local air agency) upon request. The ongoing compliance status report shall include the following information:
- 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;
  - d. the beginning and ending dates of the reporting period;
  - e. a description of the type of process performed in the emissions unit;
  - f. the total operating time of the emissions unit during the reporting period;
  - g. the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis, if determining facility size based on actual cumulative rectifier capacity;
  - h. 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;
  - i. a certification by a responsible official that the work practice standards 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 to document that the operation and maintenance plan was not followed;

- k. a description of any changes in monitoring, processes, or controls since the last reporting period;
  - l. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
  - m. the date of the report;
- (7) Pursuant to 40 CFR 63.347(h)(2), if both of the following conditions are met, the permittee shall prepare and submit semiannual ongoing compliance status reports to the Administrator (appropriate Ohio EPA district office or local air agency):
- a. the total duration of excess emissions is 1 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 monitoring equipment is 5 percent or greater of the total operating time.

Once the permittee reports an exceedance or malfunction as defined above, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

The regulating 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 source.

- (8) Pursuant to 40 CFR 63.347(h)(3), if the permittee 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, he or she 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 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, Subparts A and N; and
  - c. the regulating agency does not object to a reduced reporting frequency for the emissions unit.

The frequency of submitting ongoing compliance status reports may be reduced only after the permittee notifies the appropriate Ohio EPA district office or local air agency in writing of the intention to make such a change, and the regulating agency does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the regulating agency may review information concerning the facility's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the emissions unit's compliance

date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of the permittee's conformance with emission limitations and work practice standards. Such information may be used by the regulating agency to make a judgement about the facility's potential for noncompliance in the future. If the permittee's request to reduce the reporting frequency is disapproved, the regulating agency will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. 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 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 from the regulating agency to reduce the reporting frequency.

- (9) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the composite mesh-pad filter system and fiber-bed mist eliminator during the 12-month reporting period for this emissions unit:

- a. each period of time (start time and date, and end time and date) when the pressure drop was outside of the appropriate range or exceeded the applicable limit contained in this permit;
- b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the control device;
- c. each incident of deviation described in e)(9)a. or e)(9)b. where a prompt investigation was not conducted;
- d. each incident of deviation described in e)(9)a. or e)(9)b. where prompt corrective action, that would bring the pressure drop into compliance with the appropriate range, was determined to be necessary but was not taken; and
- e. each incident of deviation described in e)(9)a. or e)(9)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance with the opacity limitation identified above shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03.

b. Emission Limitation:

0.551 lb/hr of particulates

Applicable Compliance Method:

If required, compliance with the hourly PE limitation identified above shall be determined through testing performed in accordance with Method 5 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03.

c. Emission Limitation:

0.03 mg/dscm of total chromium

Applicable Compliance Methods:

Compliance with the chromium emission limitation identified above shall be demonstrated by monitoring conducted in accordance with the requirements of sections d)(2) and (3) of this permit.

If required, compliance with the chromium emission limitation shall be determined by stack testing performed in accordance with section f)(3) of this permit.

(2) Pursuant to 40 CFR 63.343(b), the permittee shall conduct a performance test to demonstrate initial compliance with the applicable standard in 40 CFR 63.342 within 180 days of the compliance date for this emissions unit.

The initial performance testing requirement was satisfied on July 2, 1997.

(3) Pursuant to 40 CFR 63.344(b), any performance test used to demonstrate compliance shall meet the following requirements:

a. the test methods and procedures identified in 40 CFR 63.344(c) shall be used during the performance test;

- b. the performance test shall be conducted under representative and/or worst-case operating 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 correspond to compliance with the standards, as required for continuous compliance monitoring.
- (4) Pursuant to 40 CFR 63.344(c), the permittee shall use the test methods identified below to demonstrate compliance with the applicable chromium emission limitation in 40 CFR 63.342(c)(1):
- a. Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations," of Appendix A to 40 CFR Part 63 shall be used to determine the chromium concentration from the hard chromium electroplating or anodizing tanks.
    - i. The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.70 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 total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.
  - b. The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:
    - i. If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train.
    - ii. If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).
    - iii. In the case of either paragraph above, a minimum of 3 separate runs must be conducted. The other applicable requirements of 40 CFR 63.7, must also be met.

- c. Alternative test methods may also be used if the method has been validated using Method 301 of Appendix A to 40 CFR Part 63 and if approved by the appropriate Ohio EPA district office or local air agency according to the procedures contained in 40 CFR 63.7.
  - (5) The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA district office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - (6) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air 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 district office's or local air agency's refusal to accept the results of the emission test(s).
  - (7) Personnel from the appropriate Ohio EPA district office or local air 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.
  - (8) A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA district office or local air 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 appropriate Ohio EPA district office or local air agency.
- g) **Miscellaneous Requirements**
- (1) None.



2. P003, Decorative Chrome Plating Tank

Operations, Property and/or Equipment Description:

720-gallon, decorative chromium electroplating tank controlled by a fiber-bed mist eliminator.

a) 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Rows include OAC rule 3745-17-07(A), OAC rule 3745-17-11(B), 40 CFR Part 63, Subpart N, and 40 CFR Part 63, Subpart A.

(2) Additional Terms and Conditions

a. In accordance with 40 CFR 63.340, this emissions unit is an existing, decorative chromium electroplating tank using a chromic acid bath and chromium anodizing

tanks, and is subject to the emissions limitations and control measures specified in this section.

- b. Pursuant to 40 CFR 63.342(b), this emission limitation applies during tank operation (the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank) and during periods of startup and shutdown as these are routine occurrences for the emissions unit.
- c. Pursuant to 40 CFR 63.343(a)(1)(i), the permittee shall comply with this emissions limitation no later than January 25, 1996.

c) Operational Restrictions

- (1) Pursuant to 40 CFR 63.342(f)(1), the permittee shall implement the following operation and maintenance 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 devices and monitoring equipment, in a manner consistent with good air pollution control practices; and
  - b. malfunctions shall be corrected as soon as practicable after their occurrence.

Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

- (2) Pursuant to 40 CFR 63.342(f)(2), determination of whether acceptable operation and maintenance procedures are being used shall be based information available to the Administrator (appropriate Ohio EPA district office or local air 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 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:
  - a. does not address a malfunction that has occurred;
  - b. 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 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.
- (3) Pursuant to 40 CFR 63.342(f)(3), the permittee shall prepare an operation and maintenance plan to be implemented no later than the applicable compliance date.
  - a. The plan shall include the following elements:

- i. the plan shall specify the operation and maintenance criteria for the emissions unit, 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;
  - ii. the plan shall incorporate the operation and maintenance practices for the add-on air pollution control device or monitoring equipment as identified in Table 1 to 40 CFR 63.342;
  - iii. 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; and
  - iv. the plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment, and for implementing corrective actions to address any malfunctions.
- b. 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. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
- c. 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 after commencing actions inconsistent with the plan. This verbal 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 Administrator (appropriate Ohio EPA district office or local air agency).
- d. 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 regulating agency for the life of the emissions unit. If the operation and maintenance plan is revised, the permittee shall keep previous versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the regulating agency for a period of five years after each revision to the plan.
- e. To meet the operational and maintenance plan requirements, the permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of 40 CFR 63.342(f)(3).

- (4) Pursuant to 40 CFR 63.342(g), the standards that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.
  - (5) The permittee shall operate the fiber-bed mist eliminator at all times when this emissions unit is in operation.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) Pursuant to Table 1 of 40 CFR 63.342, the permittee shall implement the following work practice standards for the fiber-bed mist eliminator control technique:
    - a. visually inspect the fiber-bed unit and prefiltering device at least once per quarter 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 device;
    - b. visually inspect the ductwork from tank or tanks to the fiber-bed mist eliminator control device at least once per quarter to ensure there are no leaks; and
    - c. perform washdown of fiber elements in accordance with the manufacturer's recommendations.
  - (2) Pursuant to 40 CFR 63.343(c)(4), the permittee shall comply with the following monitoring and recordkeeping requirements in order to demonstrate continuous compliance through the use of a fiber-bed mist eliminator:
    - a. During the initial performance test, the permittee shall determine the outlet chromium concentration using the test methods and procedures in 40 CFR 63.344(c), and shall establish as a site-specific operating parameter 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, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in 40 CFR 63.344(d)(5).
      - i. Pressure drop across the fiber-bed mist eliminator shall be maintained in a range of 0.42 ±0.20 inches of water whenever the emissions unit is in operation. This site-specific range was established during the August 15, 1997 initial performance test, which demonstrated the emissions unit at that time to be in compliance with the applicable emissions limitation for total chromium compounds.
      - ii. The permittee may conduct additional performance tests to establish a range of compliant pressure drop values.
  - (3) Pursuant to 40 CFR 63.344(d), the permittee shall implement the following procedures for site-specific operating parameters:
    - a. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the emissions unit are obtained. For monitoring equipment purchased from a vendor, verification of the

operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

- i. Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with section 2.2 of Method 2 (40 CFR Part 60, Appendix A).
  - ii. Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications.
- (4) Pursuant to 40 CFR 63.344(d)(5), the permittee shall establish the pressure drop across the add-on air pollution control device in accordance with the following guidelines:
- a. Pressure taps shall be installed at any of the following locations:
    - i. at the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
    - ii. on each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
    - iii. on the front side of the first mesh pad and back side of the last mesh pad within the control system.
  - b. Pressure taps shall be sited at locations that are:
    - i. free from pluggage as possible and away from any flow disturbances such as cyclonic demisters; and
    - ii. situated such that no air infiltration at measurement site will occur that could bias the measurement.
  - c. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
  - d. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
  - e. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.
  - f. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

- (5) Pursuant to 40 CFR 63.346(a) and (b), the permittee shall fulfill all of the applicable recordkeeping requirements outlined in 40 CFR Part 63, Subpart A, including 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 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, the 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, 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, 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, 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 required by 40 CFR 63.9, 63.10, and 63.347.
- (6) Pursuant to 40 CFR 63.346(c), all records shall be maintained for a period of five years.

## e) Reporting Requirements

- (1) Pursuant to 40 CFR 63.347(a), the permittee shall fulfill all reporting requirements as outlined in 40 CFR Part 63, Subparts A and N. Reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency:
  - 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) Pursuant to 40 CFR 63.347(c)(1), the permittee shall notify the appropriate Ohio EPA district office or local air agency in writing that the emissions unit is subject to 40 CFR Part 63, Subpart N. The initial notification shall be submitted no later than 180 calendar days after January 25, 1995, and shall contain the following information:
  - a. the name, title, and address of the owner or operator;
  - b. the address (i.e., physical location) of each emissions unit;
  - c. a statement that subpart N of this part is the basis for this notification;
  - d. identification of the applicable emission limitation and compliance date for each emissions unit;
  - e. a brief description of each emissions unit, including the type of process operation performed;
  - f. the maximum potential cumulative potential rectifier capacity;
  - g. a statement of whether the emissions unit(s) is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum potential cumulative rectifier capacity;
  - h. a statement of whether the owner or operator of the emissions unit will limit the maximum potential cumulative rectifier capacity such that the hard chromium electroplating facility is considered small; and
  - i. a statement of whether the emissions unit(s) is located at a major source or an area source as defined in 40 CFR 63.2.
- (3) Pursuant to 40 CFR 63.345(b), the permittee shall not reconstruct this emissions unit without submitting a notification of reconstruction to the appropriate Ohio EPA district office or local air agency. This notification of reconstruction shall contain the information identified in 40 CFR 63.345(b)(2) and (3), as appropriate. Reconstruction is subject only to notification and can begin upon submission of a complete notification. In addition, the permittee shall submit all initial notifications as required in 40 CFR 63.347(c)(2).

- (4) Pursuant to 40 CFR 63.347(d), the permittee shall notify the appropriate Ohio EPA district office or local air agency in writing of his or her intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin to allow the regulating agency to have an observer present during the test. In the event that the permittee is unable to conduct the performance as scheduled, the provisions of 40 CFR 63.7(b)(2) apply.
- (5) Pursuant to 40 CFR 63.347(e), the permittee shall submit to the appropriate Ohio EPA district office or local air agency, within 90 calendar days after the performance test is completed, a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the emissions unit is in compliance. The notification shall list for each emissions unit:
- a. the applicable emission limitation and the methods there were used to determine compliance with this limitation;
  - b. the test report documenting the results of the performance test, which contains the following elements:
    - i. a brief process description;
    - ii. sampling location description(s);
    - iii. a description of sampling and analytical procedures and any modifications to the standard procedures;
    - iv. 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;
    - viii. documentation of calculations; and
    - ix. any other information required by the test method;
  - c. the type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm;
  - d. for each monitored parameter for which a compliant value was established, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;
  - e. the methods that will be used to determine continuous compliance;
  - f. a description of the air pollution control technique for each emission point;

- g. a statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards;
  - h. records to support the facility is small, if determining facility size based on actual cumulative rectifier capacity; and
  - i. a statement by the owner or operator as to whether the emissions unit is in compliance.
- (6) Pursuant to 40 CFR 63.347(h)(1), the permittee shall prepare a summary report to document the ongoing compliance status of the emissions unit. This report shall be completed annually, retained on site, and be made available to the Administrator (appropriate Ohio EPA district office or local air agency) upon request. The ongoing compliance status report shall include the following information:
- 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;
  - d. the beginning and ending dates of the reporting period;
  - e. a description of the type of process performed in the emissions unit;
  - 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 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 to document that the operation and maintenance plan was not followed;
  - 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;
- (7) Pursuant to 40 CFR 63.347(h)(2), if both of the following conditions are met, the permittee shall prepare and submit semiannual ongoing compliance status reports to the Administrator (appropriate Ohio EPA district office or local air agency):
- a. the total duration of excess emissions is 1 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 monitoring equipment is 5 percent or greater of the total operating time.

Once the permittee reports an exceedance or malfunction as defined above, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

The regulating 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 source.

- (8) Pursuant to 40 CFR 63.347(h)(3), if the permittee 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, he or she 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 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, Subparts A and N; and
  - c. the regulating agency does not object to a reduced reporting frequency for the emissions unit.

The frequency of submitting ongoing compliance status reports may be reduced only after the permittee notifies the appropriate Ohio EPA district office or local air agency in writing of the intention to make such a change, and the regulating agency does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the regulating agency may review information concerning the facility's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the emissions unit's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of the permittee's conformance with emission limitations and work practice standards. Such information may be used by the regulating

agency to make a judgement about the facility's potential for noncompliance in the future. If the permittee's request to reduce the reporting frequency is disapproved, the regulating agency will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. 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 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 from the regulating agency to reduce the reporting frequency.

- (9) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the composite mesh-pad filter system and fiber-bed mist eliminator during the 12-month reporting period for this emissions unit:

- a. each period of time (start time and date, and end time and date) when the pressure drop was outside of the appropriate range or exceeded the applicable limit contained in this permit;
  - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the control device;
  - c. each incident of deviation described in e)(9)a. or e)(9)b. where a prompt investigation was not conducted;
  - d. each incident of deviation described in e)(9)a. or e)(9)b. where prompt corrective action, that would bring the pressure drop into compliance with the appropriate range, was determined to be necessary but was not taken; and
  - e. each incident of deviation described in e)(9)a. or e)(9)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance with the opacity limitation identified above shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03.

b. Emission Limitation:

0.551 lb/hr of particulates

Applicable Compliance Method:

If required, compliance with the hourly PE limitation identified above shall be determined through testing performed in accordance with Method 5 of 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03.

c. Emission Limitation:

0.01 mg/dscm of total chromium

Applicable Compliance Methods:

Compliance with the chromium emission limitation identified above shall be demonstrated by monitoring conducted in accordance with the requirements of section d)(2) of this permit.

If required, compliance with the chromium emission limitation shall be determined by stack testing performed in accordance with section f)(3) of this permit.

- (2) Pursuant to 40 CFR 63.343(b), the permittee shall conduct a performance test to demonstrate initial compliance with the applicable standard in 40 CFR 63.342 within 180 days of the compliance date for this emissions unit.

The initial performance testing requirement was satisfied on August 15, 1997.

- (3) Pursuant to 40 CFR 63.344(b), any performance test used to demonstrate compliance shall meet the following requirements:
- a. the test methods and procedures identified in 40 CFR 63.344(c) shall be used during the performance test;
  - b. the performance test shall be conducted under representative and/or worst-case operating 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 correspond to compliance with the standards, as required for continuous compliance monitoring.
- (4) Pursuant to 40 CFR 63.344(c), the permittee shall use the test methods identified below to demonstrate compliance with the applicable chromium emission limitation in 40 CFR 63.342(c)(1):
- a. Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations," of Appendix A to 40 CFR Part 63 shall be used to determine the chromium concentration from the hard chromium electroplating or anodizing tanks.
    - i. The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.70 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 total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.
  - b. The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:
    - i. If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train.
    - ii. If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).
    - iii. In the case of either paragraph above, a minimum of 3 separate runs must be conducted. The other applicable requirements of 40 CFR 63.7, must also be met.
  - c. Alternative test methods may also be used if the method has been validated using Method 301 of Appendix A to 40 CFR Part 63 and if approved by the appropriate Ohio EPA district office or local air agency according to the procedures contained in 40 CFR 63.7.

- (5) The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA district office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - (6) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA district office or local air 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 district office's or local air agency's refusal to accept the results of the emission test(s).
  - (7) Personnel from the appropriate Ohio EPA district office or local air 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.
  - (8) A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA district office or local air 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 appropriate Ohio EPA district office or local air agency.
- g) **Miscellaneous Requirements**
- (1) None.