



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

12/19/2012

Mojtaba Mir-Salimi
A-BRITE PLATING CO.
3000 W 121ST ST
CLEVELAND, OH 44111

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1318000221
Permit Number: P0111669
Permit Type: Renewal
County: Cuyahoga

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
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 Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: CDAQ



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
A-BRITE PLATING CO.**

Facility ID:	1318000221
Permit Number:	P0111669
Permit Type:	Renewal
Issued:	12/19/2012
Effective:	12/19/2012
Expiration:	12/19/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
A-BRITE PLATING CO.

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Final Permit-to-Install and Operate
 A-BRITE PLATING CO.
Permit Number: P0111669
Facility ID: 1318000221
Effective Date: 12/19/2012

Authorization

Facility ID: 1318000221
 Application Number(s): A0045942
 Permit Number: P0111669
 Permit Description: PTIO renewal for P009 and P010 decorative chrome electroplating tanks which use a chemical fume suppressant containing a wetting agent and a wet scrubber. PTI 13-04615 issued on 6/22/2006.
 Permit Type: Renewal
 Permit Fee: \$0.00
 Issue Date: 12/19/2012
 Effective Date: 12/19/2012
 Expiration Date: 12/19/2022
 Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

A-BRITE PLATING CO.
 3000 W 121ST ST
 Cleveland, OH 44111

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

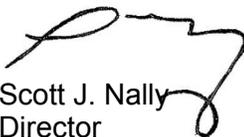
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
 2nd Floor
 75 Erieview Plaza
 Cleveland, OH 44114
 (216)664-2297

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



Final Permit-to-Install and Operate
A-BRITE PLATING CO.
Permit Number: P0111669
Facility ID: 1318000221
Effective Date: 12/19/2012

Authorization (continued)

Permit Number: P0111669

Permit Description: PTIO renewal for P009 and P010 decorative chrome electroplating tanks which use a chemical fume suppressant containing a wetting agent and a wet scrubber. PTI 13-04615 issued on 6/22/2006.

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

Emissions Unit ID:	P009
Company Equipment ID:	B-LINE
Superseded Permit Number:	13-04615
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P010
Company Equipment ID:	A-LINE
Superseded Permit Number:	13-04615
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
A-BRITE PLATING CO.
Permit Number: P0111669
Facility ID: 1318000221
Effective Date: 12/19/2012

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 Cleveland Division of Air Quality 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 submitting¹ 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.

¹Permittees 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.



Final Permit-to-Install and Operate
A-BRITE PLATING CO.
Permit Number: P0111669
Facility ID: 1318000221
Effective Date: 12/19/2012

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) B.2.
2. The following emissions units contained in this permit to 40 CFR Part 63, Subpart N, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks: P009 and P010. The complete NESHAP requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://ecfr.gpoaccess.gov> or by contacting the Cleveland Division of Air Quality (CDAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 63, Subpart N. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart N (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart N. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart N, and Subpart A.



Final Permit-to-Install and Operate
A-BRITE PLATING CO.
Permit Number: P0111669
Facility ID: 1318000221
Effective Date: 12/19/2012

C. Emissions Unit Terms and Conditions



1. P009, B-LINE

Operations, Property and/or Equipment Description:

Decorative Chrome Plating Line B, using chromic acid bath controlled by composite mesh pad and scrubber.

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 3745-31-05(A)(3) PTI 13-04615 issued on 6/22/2006	Chromium emissions shall not exceed 0.0003 ton/yr.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate stack emission shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to 40 CFR Part 63, Subpart N.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 17-11-(B)	The particulate emission limit specified by this rule is less stringent than the emission limit established by 40 CFR Part 63, Subpart N.
f.	40 CFR Part 63, Subpart N [In accordance with 40 CFR 63.340 this emission unit is an existing decorative chrome electroplating tank subject to the emissions limitations/control measures specified in this section.]	See Section B.2. See b)(2)a., c)(11), d)(3), e)(12), and f)(4) below.
g.	40 CFR 63.1-16	Appendix B to Subpart N of 40 CFR Part 63 – Applicability of General Provisions to Subpart N shows which parts of the General Provisions in 40 CFR 63.1-16 apply.

(2) Additional Terms and Conditions

a. The permittee, using a chemical fume suppressant containing a wetting agent, shall not allow the surface tension of the decorative chromium electroplating or anodizing bath(s), P001, to exceed 45 dynes per centimeter (3.1×10^{-3} pound-force/foot) as measured by a stalagmometer or 35 dynes per centimeter (2.4×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation. This limitation also applies during startup and shutdown operations, but not during periods of malfunction where work practice standards address and correct any malfunction event.

c) Operational Restrictions

- (1) The permittee shall control chromium emission discharged to the atmosphere by using a chemical fume suppressant containing a wetting agent.
- (2) The operation and maintenance plan shall incorporate the maintenance and operational practices recommended by the manufacturer of the stalagmometer or tensiometer, which shall be used to measure surface tension of the electroplating or anodizing bath. The surface tension of the electroplating or anodizing bath shall not to exceed 45 dynes per centimeter (3.1×10^{-3} pound-force/foot) as measured by a stalagmometer or 35 dynes per centimeter (2.4×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation.



- (3) After 9/18/2014, all decorative chromium electroplating tanks using a chromic acid bath and/or chromium anodizing tanks where a chemical fume suppressant containing a wetting agent is used, the surface tension of the electroplating or anodizing bath shall not to exceed 40 dynes per centimeter (2.8×10^{-3} pound-force/foot) as measured by a stalagmometer or 33 dynes per centimeter (2.3×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation.
- (4) After 9/21/2015, perfluorooctane sulfonic acid (PFOD)-based fume suppressants (containing 1% or greater PFOS by weight) shall not be used in decorative chromium electroplating tanks or chromium anodizing tanks.
- (5) The permittee shall implement the following operational, maintenance, and work practices standards for the chromium electroplating and anodizing tanks, excluding those using a trivalent chromium bath containing a wetting agent as a component ingredient in the bath:
 - a. at all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the chromium electroplating or anodizing tank(s), including the associated air pollution control device(s) and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions;
 - b. malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan;
 - c. determination of whether acceptable operation and maintenance procedures are being used shall be based on the facility records, which shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request, and which may include, but not be limited to: monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emissions unit. Based on this information, the regulating agency may require that the permittee make changes to the operation and maintenance plan if that plan:
 - i. does not address a malfunction that has occurred;
 - ii. fails to provide for the proper operation of the emissions unit, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
 - iii. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control equipment, and/or monitoring equipment as quickly as practicable.
 - d. The standards and limitations 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.



- (6) The permittee shall prepare an operation and maintenance plan. The plan shall include the following elements:
 - a. the plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (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 this equipment;
 - b. the plan shall incorporate the operation and maintenance practices for the monitoring equipment, and shall follow manufacturer's recommendations for use of stalagmometer.
 - c. the plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do no occur; and
 - d. 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 such malfunctions.
- (7) 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 actions for such events;
- (8) 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 by phone 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 Cleveland DAQ.
- (9) 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 Cleveland DAQ for the life of the affected source. 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 Cleveland DAQ for a period of 5 years after each revision to the plan.
- (10) The permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements of 40 CFR 63.342(f)(3).



- (11) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(d)	Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks.
63.342(f)	Operation and maintenance practices and plan requirements, including requirements identified in Table 1 of §63.342.
63.342(g)	Chromic acid baths shall not be reduced from hexavalent to trivalent.

d) Monitoring and/or Recordkeeping Requirements

- (1) The surface tension shall be monitored using either a stalagmometer or a tensiometer as specified in Method 306B of 40 CFR Part 63, Appendix A of Subpart N and according to the following schedule:

- a. the surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer as specified in Method 306B, appendix A of 40 CFR Part 63 Subpart N.
- b. the time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurements may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation, on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed is once every 40 hours of tank operation.
- c. once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule in b. above.
- d. once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed as in b. above.

- (2) In addition to fulfilling all record keeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the emissions unit, the permittee shall also maintain the following records:

- a. inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to documents 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 inspection and any actions taken to correct deficiencies found during the inspection.

- b. records of all maintenance performed on the affected source, the add-on pollution control 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. records of monitoring data that are used to demonstrate compliance with the standard including the date and time the data are collected;
- g. 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 pollution control, or monitoring equipment;
- h. 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 pollution control, or monitoring equipment;
- i. the total process operating time of the affected source during the reporting period;
- j. records of the date and time that fume suppressants are added to the electroplating or anodizing bath;
- k. all documentation supporting the notification and reports as outlined in the Reporting Requirements of this permit and in sections 63.9 and 63.10 of 40 CFR Part 63 Subpart A.

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

- (3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(f)(3)(v)	Maintain operation and maintenance plan for the life of the source.
63.343(a)	Compliance dates.
63.343(c)(5)	Monitoring to demonstrate continuous compliance using wetting agent-type fume suppressant.



63.346(a)	Fulfill all record keeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Shall maintain records for a period of 5 years in accordance with §63.10(b)(1).
Table 1 to §63.342	Summary of operation and maintenance practices.

e) Reporting Requirements

- (1) The 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 Cleveland DAQ.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland DAQ 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.
- (3) The permittee shall submit a notification of construction or reconstruction as soon as practicable before the constructions or reconstruction has commenced to the Cleveland DAQ which includes the following:
 - a. the permittee's name, title and address;
 - b. the address (i.e., physical locations) or proposed address of the affected source if different from the permittee's;
 - c. a notification of intention to construct or make any physical or operational changes to an affected source 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);



- a. the applicable emission limitation and the methods that were used to determine compliance with this limitation;
 - b. the surface tension measurement used to comply with the standards;
 - c. the methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements;
 - d. a statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards in this permit; and
 - e. a statement by permittee as to whether the source is in compliance.
- (7) The permittee shall submit an annual Summary Report (Ongoing Compliance Status Report) to document ongoing compliance. The report shall be completed annually and retained on site, and made available to the Cleveland DAQ, upon request. The report shall contain the information identified below:
- a. the company name and address of the source;
 - b. an identification of the operating parameter that is monitored for compliance determination;
 - c. the relevant emission limitation for the affected source, and the operating parameter value, or range or values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by this section;
 - d. the beginning and ending dates of the reporting period;
 - e. a description of the type of process performed in the affected source;
 - f. the total operating time of the affected source 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 source 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;
 - i. if the operations and maintenance plan 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 report(s) required documenting 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.
- (8) The "Summary Report" shall be prepared annually, unless it is determined that more frequent reporting is required; semiannual reports shall be prepared and submitted to the Cleveland DAQ if either of the following conditions are met:
- a. the total duration of excess emissions is 1% or greater of the total operating time for the reporting period; and
 - b. the total duration of malfunctions of the add-on air pollution control device and/or monitoring equipment is 5% or greater of the total operating time.

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

- (9) The Cleveland DAQ 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.
- (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 on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following requirements are met:
- a. for a full year (e.g. 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
 - b. the permittee continues to comply with all applicable recordkeeping and monitoring requirements of 40 CFR Part 63 Subpart A and of this permit;
 - c. the Cleveland DAQ does not object to a reduced reporting frequency, as provided below:
 - i. the frequency of submitting ongoing compliance status reports may be reduced only after the permittee notifies the Cleveland DAQ in writing of their intention to make such a change, and the Cleveland DAQ does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Cleveland DAQ may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source'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 limitation and work practice standards. Such information may be used by the Cleveland DAQ to make a judgment about the source's potential for noncompliance in the future. If the Cleveland DAQ disapproves the permittee's request to reduce reporting frequency, the Cleveland DAQ will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. The notification from the Cleveland DAQ to the permittee 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.

- ii. as soon as the monitoring data show that the source is not in compliance with the relevant emission limit, the frequency or reporting shall revert to semiannual, and the permittee shall state this exceedence 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 Cleveland DAQ to reduce the reporting frequency.

- (11) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(f)(3)(iv)	Reporting associated with the operation and maintenance plan.
63.345(b)	Notification of construction or reconstruction.
63.347(a)	Fulfill all reporting requirements identified in Subpart N and the applicable portions of Subpart A.
63.347(b)	Reporting requirements applicability.
63.347(c)	Initial notifications.
63.347(e)	Notification of compliance status.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).

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:
Chromium emissions shall not exceed 0.003 tons/yr.



Applicable Compliance Method:

Compliance with the above emission limitation shall be determined through the record keeping requirements specified in d)(3) above and the following equation (based on AP-42, 5th Edition, Vol 1, Chapter 12.20, Electroplating):

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

$$E_a = (1.2 \times 10^{-6} \text{ gr}/\text{dscf}) \times (R_c) \times (1 \text{ lb}/7000 \text{ grains}) \times (100 \text{ dscf}/A\text{-hr}) \times (\text{hrs}/\text{yr}) \times (1 \text{ ton}/ 2000 \text{ lbs})$$

Where:

E_a = actual annual chromium emissions (ton per year)

E_f = emission factor for decorative Chromium electroplating line with fume suppressant (1.2×10^{-6} gr/dscf)

R_c = rectifier capacity in amps

H_r = operating hours per year

b. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

The surface tension of the electroplating or anodizing bath shall not exceed 40 dynes per centimeter (2.8×10^{-3} pound-force per foot)

Applicable Compliance Method:

Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," shall be used to measure the surface tension of electroplating and anodizing baths.

- (2) If the permittee meets all of the following criteria, an initial performance test is not required to be conducted;
- a. the affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank; and
 - b. a wetting agent is used in the plating or anodizing bath to inhibit chromium emissions from the affected source; and



- c. the permittee complies with the applicable surface tension limit of 40 dynes per centimeter (2.8×10^{-3} pound-force per foot) as measured by a stalagmometer.
- (3) The permittee, using a wetting agent in the electroplating or anodizing bath to inhibit chromium emissions, shall conduct, or have conducted, the following testing in order to demonstrate continuous compliance with the surface tension limitation established in this permit:
- a. Method 306B, "Surface Tension Measurement and Record keeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," shall be used to measure the surface tension of the electroplating and/or anodizing bath.
 - b. The stalagmometer or tensiometer shall be operated such that representative measurements of the surface tension are obtained. The manufacturer's written accuracy specifications or recommendations for operation and calibration of the instrument shall be used to verify the operational status of the equipment.
 - c. A representative from the Cleveland DAQ shall be permitted to witness the measurement(s), upon request.
- (4) The permittee shall comply with the applicable testing methods under 40 CFR, Part 63 Subpart N, including the following sections:

63.343(b)	Methods to demonstrate initial compliance.
63.344(c)(3)	Test Method 306B shall be used for measuring surface tension.
63.344(d)(3)	Test Method 306B shall be used when wetting agent type fume suppressants are used and surface tension measurements are conducted to demonstrate continuous compliance.

g) Miscellaneous Requirements

- (1) EPA Method 306B "Surface Tension Measurement for Tanks Used at Decorative Chromium Electroplating and Chromium Anodizing Facilities" can be found at: <http://www.epa.gov/ttn/emc/methods/method306b.html>.



2. P010, A-LINE

Operations, Property and/or Equipment Description:

Decorative Chrome Plating Line A, using chromic acid bath controlled by composite mesh pad and scrubber.

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 3745-31-05(A)(3) PTI 13-04615 issued on 6/22/2006	Chromium emissions shall not exceed 0.0003 ton/yr.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate stack emission shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-07(B)(1)	Visible fugitive particulate emissions shall not exceed 20% opacity as a 3-minute average, except as provided by rule.
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established pursuant to 40 CFR Part 63, Subpart N.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 17-11-(B)	The particulate emission limit specified by this rule is less stringent than the emission limit established by 40 CFR Part 63, Subpart N.
f.	40 CFR Part 63, Subpart N [In accordance with 40 CFR 63.340 this emission unit is an existing decorative chrome electroplating tank subject to the emissions limitations/control measures specified in this section.]	See Section B.2. See b)(2)a., c)(11), d)(3), e)(12), and f)(4) below.
g.	40 CFR 63.1-16	Appendix B to Subpart N of 40 CFR Part 63 – Applicability of General Provisions to Subpart N shows which parts of the General Provisions in 40 CFR 63.1-16 apply.

(2) Additional Terms and Conditions

a. The permittee, using a chemical fume suppressant containing a wetting agent, shall not allow the surface tension of the decorative chromium electroplating or anodizing bath(s), P001, to exceed 45 dynes per centimeter (3.1×10^{-3} pound-force/foot) as measured by a stalagmometer or 35 dynes per centimeter (2.4×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation. This limitation also applies during startup and shutdown operations, but not during periods of malfunction where work practice standards address and correct any malfunction event.

c) Operational Restrictions

- (1) The permittee shall control chromium emission discharged to the atmosphere by using a chemical fume suppressant containing a wetting agent.
- (2) The operation and maintenance plan shall incorporate the maintenance and operational practices recommended by the manufacturer of the stalagmometer or tensiometer, which shall be used to measure surface tension of the electroplating or anodizing bath. The surface tension of the electroplating or anodizing bath shall not to exceed 45 dynes per centimeter (3.1×10^{-3} pound-force/foot) as measured by a stalagmometer or 35 dynes per centimeter (2.4×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation.



- (3) After 9/18/2014, all decorative chromium electroplating tanks using a chromic acid bath and/or chromium anodizing tanks where a chemical fume suppressant containing a wetting agent is used, the surface tension of the electroplating or anodizing bath shall not to exceed 40 dynes per centimeter (2.8×10^{-3} pound-force/foot) as measured by a stalagmometer or 33 dynes per centimeter (2.3×10^{-3} pound-force/foot) as measured by a tensiometer at any time during tank operation.
- (4) After 9/21/2015, perfluorooctane sulfonic acid (PFOD)-based fume suppressants (containing 1% or greater PFOS by weight) shall not be used in decorative chromium electroplating tanks or chromium anodizing tanks.
- (5) The permittee shall implement the following operational, maintenance, and work practices standards for the chromium electroplating and anodizing tanks, excluding those using a trivalent chromium bath containing a wetting agent as a component ingredient in the bath:
 - a. at all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the chromium electroplating or anodizing tank(s), including the associated air pollution control device(s) and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions;
 - b. malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan;
 - c. determination of whether acceptable operation and maintenance procedures are being used shall be based on the facility records, which shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request, and which may include, but not be limited to: monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emissions unit. Based on this information, the regulating agency may require that the permittee make changes to the operation and maintenance plan if that plan:
 - i. does not address a malfunction that has occurred;
 - ii. fails to provide for the proper operation of the emissions unit, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
 - iii. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control equipment, and/or monitoring equipment as quickly as practicable.
 - d. The standards and limitations 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.



- (6) The permittee shall prepare an operation and maintenance plan. The plan shall include the following elements:
 - a. the plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (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 this equipment;
 - b. the plan shall incorporate the operation and maintenance practices for the monitoring equipment, and shall follow manufacturer's recommendations for use of stalagmometer.
 - c. the plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do no occur; and
 - d. 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 such malfunctions.
- (7) 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 actions for such events;
- (8) 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 by phone 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 Cleveland DAQ.
- (9) 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 Cleveland DAQ for the life of the affected source. 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 Cleveland DAQ for a period of 5 years after each revision to the plan.
- (10) The permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements of 40 CFR 63.342(f)(3).



- (11) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(d)	Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks.
63.342(f)	Operation and maintenance practices and plan requirements, including requirements identified in Table 1 of §63.342.
63.342(g)	Chromic acid baths shall not be reduced from hexavalent to trivalent.

d) Monitoring and/or Recordkeeping Requirements

- (1) The surface tension shall be monitored using either a stalagmometer or a tensiometer as specified in Method 306B of 40 CFR Part 63, Appendix A of Subpart N and according to the following schedule:
- a. the surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer as specified in Method 306B, appendix A of 40 CFR Part 63 Subpart N.
 - b. the time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurements may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation, on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed is once every 40 hours of tank operation.
 - c. once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule in b. above.
 - d. once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed as in b. above.
- (2) In addition to fulfilling all record keeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the emissions unit, the permittee shall also maintain the following records:



- a. inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to documents 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 inspection and any actions taken to correct deficiencies found during the inspection.
- b. records of all maintenance performed on the affected source, the add-on pollution control 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. records of monitoring data that are used to demonstrate compliance with the standard including the date and time the data are collected;
- g. 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 pollution control, or monitoring equipment;
- h. 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 pollution control, or monitoring equipment;
- i. the total process operating time of the affected source during the reporting period;
- j. records of the date and time that fume suppressants are added to the electroplating or anodizing bath;
- k. all documentation supporting the notification and reports as outlined in the Reporting Requirements of this permit and in sections 63.9 and 63.10 of 40 CFR Part 63 Subpart A.

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

- (3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63 Subpart N, including the following sections:



63.342(f)(3)(v)	Maintain operation and maintenance plan for the life of the source.
63.343(a)	Compliance dates.
63.343(c)(5)	Monitoring to demonstrate continuous compliance using wetting agent-type fume suppressant.
63.346(a)	Fulfill all record keeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Shall maintain records for a period of 5 years in accordance with §63.10(b)(1).
Table 1 to §63.342	Summary of operation and maintenance practices.

e) Reporting Requirements

- (1) The 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 Cleveland DAQ.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland DAQ 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.
- (3) The permittee shall submit a notification of construction or reconstruction as soon as practicable before the constructions or reconstruction has commenced to the Cleveland DAQ which includes the following:
 - a. the permittee's name, title and address;
 - b. the address (i.e., physical locations) or proposed address of the affected source if different from the permittee's;
 - c. a notification of intention to construct or make any physical or operational changes to an affected source 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 from the affected source, such as preliminary design drawings and design capacity if an add-on air pollution control device is used; and
 - i. as estimate of emission from the source based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emission 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.
- (4) If a reconstruction is to occur, the permittee shall submit as soon as practicable the following information to the Cleveland DAQ:
- a. a brief description of the affected source and the components to be replaced;
 - b. a brief description of the present and proposed emission control technique, including the information required in e)(3) above;
 - c. an estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;
 - d. the estimated life of the affected source after the replacements; and
 - e. a discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Cleveland DAQ's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standards and how they do so.
- (5) The permittee shall submit to the Cleveland DAQ an initial notification report that contains the following information:
- a. the name, title and address of the owner or operator;
 - b. the address (i.e., physical location) of each affected source;
 - c. a statement that 40 CFR Part 63 Subpart N is the basis for this notification;
 - d. identification of the applicable emission limitation and compliance date for each affected source;
 - e. a brief description of each affected source, including the type of process operation performed;
 - f. a statement of whether the affected source is located at a major source or an area source.



- (6) The permittee shall submit a notification of compliance status to the Cleveland DAQ, 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 source:
- a. the applicable emission limitation and the methods that were used to determine compliance with this limitation;
 - b. the surface tension measurement used to comply with the standards;
 - c. the methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements;
 - d. a statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards in this permit; and
 - e. a statement by permittee as to whether the source is in compliance.
- (7) The permittee shall submit an annual Summary Report (Ongoing Compliance Status Report) to document ongoing compliance. The report shall be completed annually and retained on site, and made available to the Cleveland DAQ, upon request. The report shall contain the information identified below:
- a. the company name and address of the source;
 - b. an identification of the operating parameter that is monitored for compliance determination;
 - c. the relevant emission limitation for the affected source, and the operating parameter value, or range or values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by this section;
 - d. the beginning and ending dates of the reporting period;
 - e. a description of the type of process performed in the affected source;
 - f. the total operating time of the affected source 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 source 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;



- i. if the operations and maintenance plan 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 report(s) required documenting 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.
- (8) The "Summary Report" shall be prepared annually, unless it is determined that more frequent reporting is required; semiannual reports shall be prepared and submitted to the Cleveland DAQ if either of the following conditions are met:
- a. the total duration of excess emissions is 1% or greater of the total operating time for the reporting period; and
 - b. the total duration of malfunctions of the add-on air pollution control device and/or monitoring equipment is 5% or greater of the total operating time.
- Once the permittee reports an exceedance or malfunction meeting these conditions, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.
- (9) The Cleveland DAQ 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.
- (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 on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following requirements are met:
- a. for a full year (e.g. 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
 - b. the permittee continues to comply with all applicable recordkeeping and monitoring requirements of 40 CFR Part 63 Subpart A and of this permit;
 - c. the Cleveland DAQ does not object to a reduced reporting frequency, as provided below:



- i. the frequency of submitting ongoing compliance status reports may be reduced only after the permittee notifies the Cleveland DAQ in writing of their intention to make such a change, and the Cleveland DAQ does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Cleveland DAQ may review information concerning the source’s previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source’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 limitation and work practice standards. Such information may be used by the Cleveland DAQ to make a judgment about the source’s potential for noncompliance in the future. If the Cleveland DAQ disapproves the permittee’s request to reduce reporting frequency, the Cleveland DAQ will notify the permittee in writing within 45 days after receiving notice of the permittee’s intention. The notification from the Cleveland DAQ to the permittee 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.
 - ii. as soon as the monitoring data show that the source is not in compliance with the relevant emission limit, the frequency or reporting shall revert to semiannual, and the permittee shall state this exceedence 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 Cleveland DAQ to reduce the reporting frequency.
- (11) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(f)(3)(iv)	Reporting associated with the operation and maintenance plan.
63.345(b)	Notification of construction or reconstruction.
63.347(a)	Fulfill all reporting requirements identified in Subpart N and the applicable portions of Subpart A.
63.347(b)	Reporting requirements applicability.
63.347(c)	Initial notifications.
63.347(e)	Notification of compliance status.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).



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:

Chromium emissions shall not exceed 0.003 tons/yr.

Applicable Compliance Method:

Compliance with the above emission limitation shall be determined through the record keeping requirements specified in d)(3) above and the following equation (based on AP-42, 5th Edition, Vol 1, Chapter 12.20, Electroplating):

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

$$E_a = (1.2 \times 10^{-6} \text{ gr}/\text{dscf}) \times (R_c) \times (1 \text{ lb}/7000 \text{ grains}) \times (100 \text{ dscf}/\text{A-hr}) \times (\text{hrs}/\text{yr}) \times (1 \text{ ton}/2000 \text{ lbs})$$

Where:

E_a = actual annual chromium emissions (ton per year)

E_f = emission factor for decorative Chromium electroplating line with fume suppressant (1.2×10^{-6} gr/dscf)

R_c = rectifier capacity in amps

H_r = operating hours per year

b. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule; and visible emissions from fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

The surface tension of the electroplating or anodizing bath shall not exceed 40 dynes per centimeter (2.8×10^{-3} pound-force per foot)

Applicable Compliance Method:

Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," shall be used to measure the surface tension of electroplating and anodizing baths.



- (2) If the permittee meets all of the following criteria, an initial performance test is not required to be conducted;
 - a. the affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank; and
 - b. a wetting agent is used in the plating or anodizing bath to inhibit chromium emissions from the affected source; and
 - c. the permittee complies with the applicable surface tension limit of 40 dynes per centimeter (2.8×10^{-3} pound-force per foot) as measured by a stalagmometer.
- (3) The permittee, using a wetting agent in the electroplating or anodizing bath to inhibit chromium emissions, shall conduct, or have conducted, the following testing in order to demonstrate continuous compliance with the surface tension limitation established in this permit:
 - a. Method 306B, "Surface Tension Measurement and Record keeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," shall be used to measure the surface tension of the electroplating and/or anodizing bath.
 - b. The stalagmometer or tensiometer shall be operated such that representative measurements of the surface tension are obtained. The manufacturer's written accuracy specifications or recommendations for operation and calibration of the instrument shall be used to verify the operational status of the equipment.
 - c. A representative from the Cleveland DAQ shall be permitted to witness the measurement(s), upon request.
- (4) The permittee shall comply with the applicable testing methods under 40 CFR, Part 63 Subpart N, including the following sections:

63.343(b)	Methods to demonstrate initial compliance.
63.344(c)(3)	Test Method 306B shall be used for measuring surface tension.
63.344(d)(3)	Test Method 306B shall be used when wetting agent type fume suppressants are used and surface tension measurements are conducted to demonstrate continuous compliance.

g) Miscellaneous Requirements

- (1) EPA Method 306B "Surface Tension Measurement for Tanks Used at Decorative Chromium Electroplating and Chromium Anodizing Facilities" can be found at: <http://www.epa.gov/ttn/emc/methods/method306b.html>.