



**John R. Kasich**, Governor  
**Mary Taylor**, Lt. Governor  
**Craig W. Butler**, Director

7/31/2015

Certified Mail

Mojtaba Mir-Salimi  
 A-BRITE LP  
 3000 W 121ST ST  
 CLEVELAND, OH 44111

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1318000221  
 Permit Number: P0119034  
 Permit Type: Initial Installation  
 County: Cuyahoga

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](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.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](http://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 E. Hopkins, P.E.  
Assistant Chief, Permitting Section, DAPC

Cc: CDAQ



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
A-BRITE LP**

Facility ID:	1318000221
Permit Number:	P0119034
Permit Type:	Initial Installation
Issued:	7/31/2015
Effective:	7/31/2015
Expiration:	12/19/2022





**Division of Air Pollution Control  
Permit-to-Install and Operate**

for  
A-BRITE LP

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**Final Permit-to-Install and Operate**  
A-BRITE LP  
**Permit Number:** P0119034  
**Facility ID:** 1318000221  
**Effective Date:** 7/31/2015

## Authorization

Facility ID: 1318000221  
Application Number(s): A0053624  
Permit Number: P0119034  
Permit Description: Initial PTIO for P012, a decorative chrome plating line with one hexavalent chrome tank and three trivalent chrome tanks, controlled by a scrubber utilizing composite mesh pads and HEPA filters.  
Permit Type: Initial Installation  
Permit Fee: \$200.00  
Issue Date: 7/31/2015  
Effective Date: 7/31/2015  
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 LP  
3000 W 121ST ST  
Cleveland, OH 44111

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

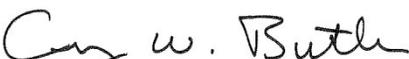
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
A-BRITE LP  
**Permit Number:** P0119034  
**Facility ID:** 1318000221  
**Effective Date:** 7/31/2015

## Authorization (continued)

**Permit Number:** P0119034  
**Permit Description:** Initial PTIO for P012, a decorative chrome plating line with one hexavalent chrome tank and three trivalent chrome tanks, controlled by a scrubber utilizing composite mesh pads and HEPA filters.

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

<b>Emissions Unit ID:</b>	<b>P012</b>
Company Equipment ID:	Decorative Tri and Hex Chrome Line
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
A-BRITE LP  
**Permit Number:** P0119034  
**Facility ID:** 1318000221  
**Effective Date:** 7/31/2015

## **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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] 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 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 emission 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.

**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 LP  
**Permit Number:** P0119034  
**Facility ID:** 1318000221  
**Effective Date:** 7/31/2015

## **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 unit contained in this permit is subject 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: P012. 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://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).

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 A (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 LP  
**Permit Number:** P0119034  
**Facility ID:** 1318000221  
**Effective Date:** 7/31/2015

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



**1. P012, Decorative Trivalent and Hexavalent Chrome Line**

**Operations, Property and/or Equipment Description:**

Decorative trivalent and hexavalent chrome plating line - three trivalent chrome tanks, each employing an integrated wetting agent and foam blanket, and one hexavalent chrome tank employing foam blanket and chemical fume suppressant w/wetting agent, all controlled by a composite mesh pad 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. b)(1)b., b)(2)b.

(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) June 30, 2008	The requirements of this rule are equivalent to 40 CFR, Part 63, Subpart N. See b)(2)a. below.
b.	OAC Rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the chromium emissions from this air contaminant source since the potential to emit is less than 10 tons per year (TPY). See b)(2)b. below.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)	The control measures specified by this rule are less stringent than the control measures established by 40 CFR Part 63, Subpart N.
e.	OAC rule 3745-17-11(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 emissions unit is a new decorative chrome electroplating tank subject to the emissions limitations/control measures specified in this section.]	Chromium emissions shall not exceed 0.006 mg/dscm in <b>hexavalent chromium baths</b> . <b>Trivalent chromium baths</b> must employ an integrated wetting agent. See b)(2)d. – b)(2)f. 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. This BAT emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.  
  
The presence of uncombined water vapor (i.e., no particulate matter is entrained) in the scrubber plume does not constitute visible emissions.
- d. After 9/21/2015 perfluorooctanesulfonic acid (PFOS)-based fume suppressants (containing 1% or greater PFOS by weight) shall not be used in decorative chromium electroplating tanks.

e. For each chromium electroplating tank using a **hexavalent chromic acid bath**, the permittee, using a chemical fume suppressant containing a wetting agent, shall not allow the surface tension of the decorative chromium electroplating tank(s) using a chromic acid bath to exceed 40 dynes per centimeter ( $2.8 \times 10^{-3}$  pound-force/foot) as measured by a stalagmometer or 33 dynes per centimeter ( $2.3 \times 10^{-3}$  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.

f. For each chromium electroplating tank using a **trivalent chromium bath** purchased with a wetting agent, the wetting agent used in the decorative trivalent chromium bath(s), shall be documented to be an ingredient in the bath component(s) as purchased from the vendor(s), or it shall be clearly identified as a constituent contained in one of the components of the bath.

If the permittee ceases to use a bath component containing a wetting agent as purchased from the vendor in the trivalent chromium bath, the permittee shall comply with the applicable emission limitation of Subpart N within one year of switching bath components. Within 30 days of the change, the permittee shall submit a report to notify the Cleveland DAQ of the process change and the applicable limitation required by the rule, from 40 CFR 63.342.

c) Operational Restrictions

(1) For each chromium electroplating tank using a **hexavalent chromic acid bath**:

a. The permittee shall implement the following operation, maintenance, and work practices standards:

i. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the chromium electroplating tank(s), including the associated air pollution control device(s) and monitoring equipment, in a manner consistent with good air pollution control practices.

ii. Malfunctions shall be corrected as soon as practicable after their occurrence.

iii. The 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 DAQ upon request, and which may include, but not be limited to: monitoring results; review of the operation and maintenance plan, operation procedures, and records; and inspection of the tank(s). Based on this information, the Cleveland DAQ may require the permittee to make changes to the operation and maintenance plan if the plan:

(a) does not address a malfunction that has occurred;

- (b) fails to provide for the proper operation of the tank(s), the air pollution control techniques, and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
    - (c) does not provide adequate procedures for correcting malfunctioning process equipment and/or monitoring equipment as quickly as practicable.
  - iv. 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.
  - v. These operation and maintenance standards are enforceable independent of the emission standards.
- b. The permittee shall prepare an operation and maintenance plan to be implemented no later than the startup of the unit or the compliance date. The plan shall include the following elements:
  - i. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device, and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment.
  - ii. The 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 bath. Until performance testing is conducted and an alternative parameter limitation is established, the surface tension of the electroplating bath shall not exceed 40 dynes per centimeter ( $2.8 \times 10^{-3}$  pound-force/foot) as measured by a stalagmometer or 33 dynes per centimeter ( $2.3 \times 10^{-3}$  pound-force/foot) as measured by a tensiometer at any time during tank operation.
  - 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.
  - iv. The plan shall include a systematic procedure for identifying malfunctions of process equipment and process and control system monitoring equipment, and for implementing corrective actions to address any malfunctions.
  - v. The plan shall include housekeeping procedures as specified in Table 2 to Subpart N.
  - vi. 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 and monitoring equipment during similar malfunction events, and a program for corrective action for such events.

- vii. 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 Cleveland DAQ within 2 working days following the actions performed inconsistent with the plan. This verbal report shall be followed by a letter within 7 working days following the event, unless the permittee makes alternative reporting arrangements, in advance, with the Cleveland DAQ.
- viii. The permittee shall maintain the written operation and maintenance plan on record at the facility; and it shall be made readily available for inspection, at the request of the Cleveland DAQ and for the life of the emissions unit. If the operation and maintenance plan is revised, the permittee shall maintain previous versions of the plan at the facility for a period of 5 years following each revision; the superseded version(s) of the plan shall also be made available for inspection, if so requested by the Cleveland DAQ.
- ix. 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).

- (2) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63, Subpart N, including the following sections for all chromium electroplating tanks using a **hexavalent chromic acid bath**:

63.342(d)	Standards for decorative chromium electroplating tanks using a chromic acid bath.
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.

- (3) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections for all chromium electroplating tanks using a **trivalent chromium bath**:

63.342(e)	Standards for decorative chromium electroplating tanks using a trivalent chromium bath.
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d) Monitoring and/or Recordkeeping Requirements

(1) For each chromium electroplating tank using a **hexavalent chromic acid bath**:

- a. In addition to fulfilling all recordkeeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the chromium electroplating tanks, the permittee shall also maintain the following records:
  - i. inspection records for the monitoring equipment, i.e., the stalagmometer or tensiometer, to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) and Table 1 of 40 CFR 63.342 have been performed. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection;
  - ii. records of all maintenance performed on the tank(s) and monitoring equipment, except routine housekeeping practices;
  - iii. records of the occurrence, duration, and cause (if known) of each malfunction of process and monitoring equipment;
  - iv. records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.342(a)(1), including corrective actions to restore malfunctioning process and monitoring equipment to its normal and usual manner of operation;
  - v. other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 CFR 63.342(f)(3);
  - vi. test reports documenting results of all performance tests for the surface tension;
  - vii. all measurements as may be necessary to determine the conditions of performance tests;
  - viii. records of monitoring data, required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
  - ix. 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 or monitoring equipment;
  - x. the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by an exceedance of the surface tension limitation, that occurs during periods other than malfunction of the process or monitoring equipment;

- xi. the total process operating time of the chromium electroplating tank(s) during the reporting period;
- xii. all documentation supporting the notifications and reports as outlined in the "Reporting Requirements" section of this permit and the general reporting requirements in 40 CFR 63.9 and 40 CFR 63.10, from Subpart A and 40 CFR 63.347; and
- xiii. records of the date and time that fume suppressants are added to the electroplating baths and records of the fume suppressant manufacturer and product name.

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

- b. The permittee shall perform the following monitoring and recordkeeping requirements in order to demonstrate compliance through the use of the wetting agent or combination wetting agent/foam blanket fume suppressant:
  - i. The surface tension of the bath, measured as specified in Method 306B (from Appendix A of Part 63), shall be established as the site-specific operating parameter, setting the maximum value as that established during the compliant performance test; or
  - ii. In lieu of establishing the maximum surface tension during the performance test for chromium emissions, the permittee may instead demonstrate compliance with the surface tension limitation of the NESHAP.
  - iii. On and after the date on which the initial performance test is or was required to be completed under 40 CFR 63.7, the permittee shall monitor the surface tension of the electroplating or anodizing bath according to the schedule in paragraph "iv" below. The permittee shall maintain the surface tension:
    - (a) at or below the surface tension established during a compliant performance test for the applicable chromium emission limitation; or
    - (b) at or below 40 dynes per centimeter ( $2.8 \times 10^{-3}$  pound-force/foot) as measured by a stalagmometer; or
    - (c) at or below 33 dynes per centimeter ( $2.3 \times 10^{-3}$  pound-force/foot) as measured by a tensiometer.
  - iv. The surface tension shall be monitored using either a stalagmometer or a tensiometer as specified in Method 306B from Appendix A of Part 63 and according to the following schedule:
    - (a) Following the compliance date, the surface tension shall be measured once every 4 hours during tank operation.

- (b) The time between monitoring can be increased if there have been no exceedances. If there are no exceedances during each of the 4-hour measurements during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Again if there are no exceedances of the 8-hour measurements 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 surface tension measurements shall be once in every 40 hours of tank operation.
  - (c) Once an exceedance has occurred, as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed and a subsequent decrease in frequency shall follow the schedule 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 following the schedule above.
- (2) For each chromium electroplating tank using a **trivalent chromium bath** purchased with a wetting agent as a bath ingredient:
- a. In addition to fulfilling all recordkeeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the chromium electroplating tanks, the permittee shall also maintain the following records:
    - i. the total process operating time of the emissions unit during the reporting period;
    - ii. all documentation supporting the notifications and reports as outlined in the "Reporting Requirements" section of this permit and the general reporting requirements in 40 CFR 63.9 and 40 CFR 63.10, from Subpart A and 40 CFR 63.347; and
    - iii. records of the bath components purchased, with the wetting agent clearly identified as a bath constituent.
- All records shall be maintained for a period of five years.
- (3) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart N, including the following sections for all chromium electroplating tanks using a **hexavalent chromic acid bath**:

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 recordkeeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Permittee 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.

- (4) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63 Subpart N, including the following sections for all chromium electroplating tanks using a **trivalent chromium bath**:

63.343(a)	Compliance dates.
63.346(b)(14)	Maintain records of bath components purchased.
63.346(c)	Maintain records for a period of 5 years in accordance with §63.10(b)(1).

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through Ohio EPAs eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Cleveland Division of Air Quality (Cleveland DAQ).
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland DAQ by the date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) Within 30 days of beginning construction or reconstruction, the permittee shall submit to the permitting authority, the notification of the date construction or reconstruction commenced and the notification of the startup date within 30 days of startup.
- (4) For each chromium electroplating tank using a **hexavalent chromic acid bath**:
  - a. The permittee shall submit a “Notification of Compliance Status Report” 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 include the following information for each chromium electroplating tank using a hexavalent chromic acid bath:

- i. the applicable emission limitation and the methods that were used to determine compliance with this limitation;
- ii. the highest surface tension measurement recorded during the initial performance test, established using U.S. EPA Method 306B, from Appendix A of 40 CFR Part 63;
- iii. a statement verifying that the surface tension is being monitored according to the requirements and schedule identified in 40 CFR 63.343(c);
- iv. the rectifier capacity of the tank(s);
- v. for each monitored parameter for which a compliant value was established under 40 CFR 63.343(c), the specific operating parameter value, or range of values, that corresponds to compliance with the applicable limit;
- vi. the methods that shall be used to determine continuous compliance;
- vii. a description of the air pollution control method(s) used for each emission point;
- viii. a statement that the permittee has completed and maintains an operation and maintenance plan as required by the work practice standards in 40 CFR 63.342(f); and
- ix. a statement by the permittee as to whether the emissions unit is in compliance.

The permittee shall have sufficient data to establish the operating parameter value(s) that corresponds to compliance as required for continuous compliance monitoring. Submit the "Notification of Compliance Status Report" to the Cleveland DAQ no later than 30 days following the applicable compliance date identified in 40 CFR 63.343(a).

- b. The permittee, qualifying as an area source, shall prepare an annual "Summary Report" ("Ongoing Compliance Status Report") to document ongoing compliance. The "Summary Report" shall be maintained onsite and made available to the Cleveland DAQ upon request. This report shall include the following:
  - i. the company name and address of the emissions unit;
  - ii. a description of the source, type of process performed, and the air pollution control method and monitoring device(s) that is/are/shall be used to demonstrate continuous compliance;
  - iii. an identification of the operating parameter(s) that is/are/shall be monitored for compliance determination;

- iv. the relevant emission limitation for the emissions unit, and the operating parameter value(s), or range of values, established during compliance testing and reported in the notification of compliance status report(s);
- v. the beginning and ending dates of the reporting period;
- vi. the total operating time of the emissions unit during the reporting period;
- vii. 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 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, and other known causes, and unknown causes;
- viii. a certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit;
- ix. if the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit;
- x. a description of any changes in monitoring, processes, or controls since the last reporting period;
- xi. the number and duration and a brief description of each type of malfunction that occurred during the reporting period and which caused or may have caused an exceedance of any applicable emission limitation; and a description of actions taken by the permittee to minimize emissions, in accordance with 40 CFR 63.342(a)(1), and correct the malfunction;
- xii. the date of the report;
- xiii. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- xiv. the report shall be completed annually and retained on site, and made available to the Cleveland DAQ upon request.

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 is met:

- xv. the total duration of excess emissions is 1% or greater of the total operating time for the reporting period; and

- xvi. the total duration of malfunctions of 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 those conditions, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.

- c. Based on which measures accurately assess the compliance status of the chromium emissions unit(s) located at the area source, the Cleveland DAQ may determine, on a case-by-case basis, if the “Summary Report” (“Ongoing Compliance Status Report”) must be completed more frequently than annually and if it must be submitted to the Cleveland DAQ or can be retained onsite.
- d. The permittee, who qualifies as an area source but has been required to submit “Summary Reports” on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual (or semi-annual if quarterly) and/or may be permitted to maintain the report on site, rather than submit the annual or semi-annual report, if all of the following conditions are met:
  - i. for 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected chromium electroplating tanks are in compliance with the relevant emission limit;
  - ii. the permittee continues to comply with all applicable recordkeeping and monitoring requirements of 40 CFR Part 63, Subparts A and N; and
  - iii. the Cleveland DAQ does not object to a reduced reporting frequency.

The frequency of completing and/or submitting the “Summary Reports” may be reduced or the report maintained on site (not required to be submitted) only after the permittee notifies the Cleveland DAQ in writing of the intention to make the change and the Cleveland DAQ does not object. In deciding whether to approve a reduced reporting frequency or to allow the report to be retained on site, the Cleveland DAQ may request to review information concerning the facility’s previous performance history during the 5-year recordkeeping period prior to the intended change in reporting frequency, or the recordkeeping period since the compliance date, whichever is shorter. Records subject to review include performance test results, monitoring data, and evaluations of the permittee’s conformance with emission limitations and work practice standards. If the permittee’s request is disapproved, the Cleveland DAQ will notify the permittee in writing within 45 days after receiving notice. This notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

As soon as the monitoring data show that the facility is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannually, and the permittee shall document this exceedance in the “Ongoing Compliance Status/Summary Report”, for the next reporting period. After demonstrating

ongoing compliance with the relevant emission limit for another full year, the permittee may again request approval to reduce the reporting frequency.

- (5) For each chromium electroplating tank using a **trivalent chromium bath** purchased with a wetting agent as a bath ingredient:
- a. The permittee shall submit a "Notification of Compliance Status Report" 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 include the following information for each trivalent chromium electroplating tank subject to the NESHAP and demonstrating compliance through this method:
    - i. the permittee's name, title, and address;
    - ii. the address (i.e., physical location) or proposed address of the affected emissions unit if different from the permittee's;
    - iii. a notification of intention to construct or make any physical or operational changes to the affected emissions unit that may meet or has been determined to meet the criteria for a reconstruction as defined in 40 CFR 63.2;
    - iv. an identification of 40 CFR Part 63, Subpart N as the basis for the notification and if the facility is a major or area source;
    - v. identification of the applicable emission limitations and compliance date;
    - vi. a statement that the decorative chromium electroplating process uses or will use a trivalent chromium bath that incorporates a wetting agent as an ingredient of the bath components, packaged as purchased; and
    - vii. the list of components that comprise the trivalent chromium bath, with the wetting agent clearly defined.

The "Notification of Compliance Status Report" shall be submitted to the Cleveland DAQ, no later than 30 days from the compliance date or 30 days after startup of the decorative chromium electroplating operations if a new source.

- b. Within 30 days of any change to the trivalent chromium electroplating process, the permittee shall submit a report that includes the following information:
  - i. a description of the manner in which the process has been changed and the emission limitation, if any, now applicable to the affected emissions unit;
  - ii. the information required in the initial notification report, 40 CFR 63.347(c)(1), identifying the owner, address, and applicable limitation in Part 63, Subpart N; and

- iii. if no longer using a wetting agent as a component of the electroplating bath, the information contained in the notification and reporting requirements of 40 CFR 63.347, including:
  - (a) the notification of performance test in 63.347(d);
  - (b) the notification of compliance status in 63.347(e);
  - (c) the reports of performance test results in 63.347(f); and
  - (d) the ongoing compliance status reports in 63.347(g) and (h).

A decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent, and that ceases using the trivalent chromium process with a wetting agent, must comply with the emission limitation applicable to the tank within 1 year of switching the bath components.

- (6) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart N, including the following sections for all chromium electroplating tanks using a **hexavalent chromic acid bath**:

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(e)	Notification of compliance status.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).

- (7) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63 Subpart N, including the following sections for all chromium electroplating tanks using a **trivalent chromium bath**:

63.345(b)	Notification of construction or reconstruction.
63.347(i)	Reports associated with trivalent chromium baths.

f) Testing Requirements

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

a. Emission Limitation

Chromium emissions shall not exceed 0.006 mg/dscm in **hexavalent chromium baths**.

Applicable Compliance Method

If required, Method 306 or Method 306A, "Determination of Chromium Emissions from Decorative and Hard Chromium Electroplating and Anodizing Operations" shall be used to determine the total chromium concentration from the electroplating tank(s).

b. Emission Limitation

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

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

For each chromium electroplating tank using a **hexavalent chromic acid bath**, the surface tension shall not exceed one of the following:

the site specific surface tension established during the initial or most recent compliant stack test for the add-on control device; or

40 dynes per centimeter ( $2.8 \times 10^{-3}$  pound-force/foot) when measured by a stalagmometer;

33 dynes per centimeter ( $2.3 \times 10^{-3}$  pound-force/foot) when measured by a tensiometer.

Applicable Compliance Method

The permittee, using a wetting agent or wetting agent/foam blanket fume suppressant in the electroplating bath(s) to inhibit chromium emissions, shall conduct, or have conducted, the following testing in order to establish the site-specific operating parameter for surface tension or to demonstrate continuous compliance with the surface tension limitation established in this permit:

- i. Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities", from Appendix A to Part 63, shall be used to measure the surface tension of the electroplating bath(s).
- ii. 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.
- iii. A representative from the Cleveland DAQ shall be permitted to witness the measurement(s), upon request.
- iv. The permittee shall conduct continuous compliance monitoring required in 40 CFR 63.343(c)(5)(ii), by reading and recording the surface tension once every 4 hours for the first 40 hours of tank operation; then once every 8 hours of tank operation for an additional 40 hours of tank operations if there are no exceedances during the first 40 hours; and if there are still no exceedances, the minimum frequency of surface tension monitoring shall be once every 40 hours of tank operation. Once an exceedance occurs, the "once every 4 hour" frequency resumes, and a reduction of the monitoring frequency shall follow the same schedule.

(2) The decorative **trivalent chromium electroplating tanks** are not subject to the work practice requirements of 40 CFR 63.342(f) or the continuous compliance monitoring requirements for the surface tension found in 40 CFR 63.343(c) if the following requirements are met:

- a. the trivalent chromium bath is purchased with a wetting agent incorporated as a component of the trivalent chromium bath ingredients;
- b. the permittee maintains records of the bath components, with the wetting agent clearly identified as a bath constituent contained in one of the components; and
- c. the permittee submits an initial notification documenting that the trivalent chromium process incorporates a wetting agent to comply with 40 CFR 63.432(e) and the list of bath components that comprise the trivalent chromium bath with the wetting agent clearly identified.

(3) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart N, including the following sections for all chromium electroplating tanks using a **hexavalent chromic acid bath**:

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.
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- (4) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63 Subpart N, including the following sections for all chromium electroplating tanks using a **trivalent chromium bath**:

63.343(b)(3)	Methods to demonstrate initial compliance for decorative chromium electroplating tanks using a trivalent chromium bath.
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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>.