



5/14/2015

Certified Mail

Mr. James Amburgey  
 Materion Brush Inc.  
 14710 W. Portage River South Rd  
 Elmore, OH 43416

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL  
 Facility ID: 0362000009  
 Permit Number: P0118257  
 Permit Type: Administrative Modification  
 County: Ottawa

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
Yes	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
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 (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. 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 PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
 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 Ohio EPA DAPC, Northwest District Office at (419)3528461 or the Office of Compliance Assistance and Pollution Prevention at (614)644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA  
Ohio EPA-NWDO; Michigan; Canada



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Materion Brush Inc.**

Facility ID:	0362000009
Permit Number:	P0118257
Permit Type:	Administrative Modification
Issued:	5/14/2015
Effective:	5/14/2015





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Materion Brush Inc.

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## Authorization

Facility ID: 0362000009  
Facility Description: Copper Rolling and Drawing  
Application Number(s): A0052486  
Permit Number: P0118257  
Permit Description: Administrative modification for Beryllium Parts Surface Treatment Laboratory mainly used for R&D purposes that contains an existing chromium anodizing tank which can be used to produce production parts when needed. The anodizing tank is subject to MACT Subpart N and GACT Subpart WWWW when production parts are produced.  
Permit Type: Administrative Modification  
Permit Fee: \$200.00  
Issue Date: 5/14/2015  
Effective Date: 5/14/2015

This document constitutes issuance to:

Materion Brush Inc.  
14710 W. Portage River South Road  
1/4 mile east of SR 590  
Elmore, OH 43416-9502

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

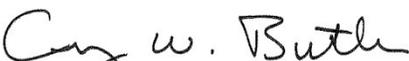
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118257  
**Facility ID:** 0362000009  
**Effective Date:**5/14/2015

## Authorization (continued)

Permit Number: P0118257  
Permit Description: Administrative modification for Beryllium Parts Surface Treatment Laboratory mainly used for R&D purposes that contains an existing chromium anodizing tank which can be used to produce production parts when needed. The anodizing tank is subject to MACT Subpart N and GACT Subpart WWWWWW when production parts are produced.

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>P123</b>
Company Equipment ID:	Be Products Surface Treatment R&D Laboratory
Superseded Permit Number:	P0106908
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118257  
**Facility ID:** 0362000009  
**Effective Date:** 5/14/2015

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



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

## **2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **6. Compliance Requirements**

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted



local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.



**8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

**11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the



Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



**13. Construction Compliance Certification**

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

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

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118257  
**Facility ID:** 0362000009  
**Effective Date:** 5/14/2015

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



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118257  
**Facility ID:** 0362000009  
**Effective Date:** 5/14/2015

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. The ambient concentration of Beryllium (Be) in the vicinity of the facility shall not exceed 0.01 micrograms ( $\mu\text{g}$ )/cubic meter, averaged over a 30-day period, as specified in the National Emissions Standard for Hazardous Air Pollutants, 40 CFR 61.32(b). The permittee shall properly operate and maintain control equipment and implement control measures for all Be-emitting emissions units at the facility.



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118257  
**Facility ID:** 0362000009  
**Effective Date:** 5/14/2015

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



**1. P123, Be Products Surface Treatment R&D Laboratory**

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

Beryllium Parts Surface Treatment R&D Laboratory

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(4) and g)(1).
- 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), as effective 11/30/01	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D)	9.9 tons volatile organic compounds (VOC) per rolling, 365-day period  Particulate matter equal to or less than 10 microns in size (PM <sub>10</sub> ) shall not exceed 0.046 lb/hr and 0.20 ton/yr.  Beryllium (Be) emissions shall not exceed 0.00000017 lb/hr and 0.00000075 ton/yr.  Visible particulate emissions (PE) shall not exceed 5% opacity, as a six-minute average.  See b)(2)c., b)(2)d., and c)(1)
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.
f.	OAC rule 3745-17-11(C)	See b)(2)g.
g.	OAC rule 3745-21-09(U)	See b)(2)h. and b)(2)i.
h.	OAC rule 3745-21-09(O)	see c)(2), d)(8), d)(9), e)(4) and f)(2)
i.	40 CFR 61.32(b)	See term 2 of section B. – FACILITY-WIDE TERMS AND CONDITIONS.
j.	40 CFR, Part 63, Subpart N 40 CFR 63.340 – 63.348	This emission unit shall comply with all the applicable sections of 40 CFR, Part



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		63, Subpart N.  See b)(2)j. - b)(2)m., c)(3), c)(4), d)(10), and e)(5) – e)(10), f)(1)f., f)(1)g. and g)(2)
k.	40 CFR, Part 63, Subpart WWWWWW (63.11504 – 63.11513)  [In accordance with 40 CFR 63.11505(b), this emissions unit is an existing source, subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Area Source Standards for Plating and Polishing Operations]	See b)(2)n. and b)(2)o., c)(5), d)(11), and e)(11)

(2) Additional Terms and Conditions

- a. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the PM<sub>10</sub> emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).



Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the VOC emissions from this air contaminant source since the restricted potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

- c. This permit establishes a federally enforceable limitation of 9.9 ton of VOC per rolling, 365-day period for the purposes of establishing the potential to emit (PTE).

This permit also establishes the following federally enforceable emission limitations for the purpose of limiting PTE to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

- i. 0.046 lb PM<sub>10</sub>/hr and 0.20 ton PM<sub>10</sub>/yr;
  - ii. 0.00000017 lb Be/hr and 0.00000075 ton Be/yr; and
  - iii. Visible PE shall not exceed 5% opacity, as a six-minute average.
- d. The emissions of VOC from this emissions unit shall not exceed 9.9 tons per year, based upon a rolling, 365-day summation of the daily emissions. This emission unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 365-day summation of emissions upon issuance of this permit.
  - e. The uncontrolled mass rate of PE from P123 is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
  - f. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.
  - g. Pursuant to OAC rule 3745-17-11(A)(1)(h), OAC rule 3745-17-11(C) does not apply to any surface coating processes that apply only dip coatings, roll coatings, flow coatings, or brush coatings.
  - h. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(U)(1) pursuant to OAC rule 3745-21-09(U)(2)(e)(iii).
  - i. The permittee shall not employ more than 10 gallons of coating per day for the miscellaneous metal parts and products coating operations. The daily usage limitation for the coating line shall not include coatings applied to parts and products which are not metal.
  - j. If a chemical fume suppressant containing a wetting agent is used, the permittee shall not allow the concentration of total chromium emissions in the exhaust stream



discharged from the opensurfacehard chromium electroplating tank(s) to exceed 40 dynes per centimeter (dynes/cm) ( $2.8 \times 10^{-3}$  pound-force per foot (lbf/ft)), as measured by a stalagmometer, or 33 dynes/cm ( $2.3 \times 10^{-3}$  lbf/ft), as measured by a tensiometer at any time during tank operation.

- k. For existing open surface, hard chromium electroplating tanks located at a small hard chromium electroplating facility (that has a maximum cumulative potential rectifier capacity of less than 60 million amp-hr/yr), the concentration of total chromium emissions in the exhaust gas stream discharged to the atmosphere shall not exceed 0.015 mg/dscm ( $6.6 \times 10^{-6}$  gr/dscf), except where complying with the surface tension standard using a chemical fume suppressant containing a wetting agent.
- l. After 9/21/2015, perfluorooctane sulfonic acid (PFOS)-based fume suppressants (containing 1% or greater PFOS by weight) shall not be used in open surface hard chromium electroplating tanks.
- m. Pursuant to 40 CFR 63.340(d), chromium anodizing operations for R&D purposes are exempt from NESHAP Subpart N when permittee operates the emission unit for such purpose.
- n. The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart WWWW, including the following sections:

63.11507(a) and (g)	Standards and Management Practices
63.11508(b)	Management Practices and Equipment Standards

- o. Pursuant to 40 CFR 63.11505(d)(2), sodium dichromate sealing operations for R&D purposes are exempt from NESHAP Subpart WWWW when permittee operates the emission unit for such purpose.
- p. The emissions from the following processes associated with this emissions unit: Caustic Treatment, Chemical Film Coating, Chromic Acid Anodizing, Chromate Sealing, and Other Surface Treatments, shall be vented to a wet scrubber at all times when any of the processes are in operation.

c) **Operational Restrictions**

- (1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)c.]:
  - a. This emissions unit shall be vented to a wet scrubber system with a control efficiency of 90% for PM<sub>10</sub> and Be; and
  - b. The use of dry filtration achieving a 95% control efficiency for PM<sub>10</sub>.



- (2) The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
  - a. A permanent, legible, conspicuous label, summarizing the operating requirements shall be maintained near or attached to the cold cleaner.
  - b. Waste solvent shall be stored in covered containers.
  - c. The cover shall remain closed whenever parts are not being handled in the cleaner.
  - d. Cleaned parts shall drain until dripping ceases.
  - e. If used, a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) shall be supplied at a pressure that does not exceed 10 pounds per square inch gauge.
  - f. Porous and/or absorbent materials shall not be cleaned in the cold cleaner.
  
- (3) 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 good air pollution control practices.
  - b. Malfunctions shall be corrected as soon as practicable after their occurrence.
  - c. 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 regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) upon request, and which may include, but not be limited to: monitoring results, review of the operation and maintenance plan, operational procedures, and records, and inspection of the tank(s). Based on this information, the regulating agency may require the permittee to make changes to the operation and maintenance plan if the plan:
    - i. does not address a malfunction that has occurred;
    - ii. fails to provide for the proper operation of the tank(s), 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.
  - e. These operation and maintenance standards are enforceable independent of the emission standards.
- (4) 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:
- a. 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.
  - b. The plan shall incorporate the operation and maintenance practices for add-on air pollution control device(s) and monitoring equipment as identified in Table 1 to Subpart N; or if the equipment is not identified in Table 1, the operation and maintenance plan shall incorporate operation and maintenance practices.
  - 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 not occur.
  - d. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control device(s), and process and control system monitoring equipment, and for implementing corrective actions to address any malfunctions.
  - e. The plan shall include housekeeping procedures as specified in Table 2 to Subpart N.
  - f. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
  - g. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report such actions by phone to the regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) 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 regulating agency.

- h. 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 regulating agency and for the life of the tank(s). 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 superceded version(s) of the plan shall also be made available for inspection, if so requested by the regulating agency.
- i. 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).

- (5) The permittee shall comply with the applicable restrictions required under 40 CFR part 63, Subpart WWWW, including the following sections:

63.11508(c) and (d)	Work Practice Requirements
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d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for the coating line:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed; and
  - c. the total volume, in gallons, of all of the coatings employed.
- (2) The permittee shall collect and record the following information on a daily basis for the cleanup materials applied in this emissions unit:
  - a. the number of gallons of each coating applied and solvent degreaser employed;
  - b. the maximum VOC content for each coating applied and solvent degreaser employed, in pounds per gallon;
  - c. the total VOC emissions from all coatings applied and solvent degreaser employed, i.e., the summation of the products of d)(2)a. times d)(2)b. for all the coatings applied and solvent degreaser employed;
  - d. the name and identification of each cleanup material employed;
  - e. the VOC content of each cleanup material, in pounds per gallon;
  - f. the number of gallons of each cleanup material employed;



- g. the total VOC emission rate from all cleanup materials, i.e., the summation of the products of d)(2)e. times d)(2)f. for all cleanup materials employed; and
    - h. the total VOC emissions from all coatings, degreaser and cleanup materials employed, in pounds or tons, the sum of d)(2)c. and d)(2)g.
- (3) In order to demonstrate compliance with the 365-day, rolling VOC emission limitation, the permittee shall collect and record the following information each day for this emissions unit:
  - a. the 365-day summation, in tons, of the daily VOC emission rates, i.e., the summation of d)(2)h.
- (4) In order to ensure compliance with the "Toxic Air Contaminant Statute", each time the permittee makes a chemical change for a degreaser, coating material or clean-up material, the permittee must evaluate if the change results in an increase of over 1.0 ton per year for any toxic contaminant. If the 1.0 ton per year threshold is exceeded, please see g)(1).
- (5) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber and the scrubber liquid flow rate shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.
- (6) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge) and the scrubber liquid flow rate (in gallons per minute) during operation of this/these emissions unit(s), including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable range or limit for the pressure drop across the scrubber and the scrubber liquid flow rate shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and



- e. the findings and recommendations.
- (7) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:
- a. a description of the corrective action;
  - b. the date the corrective action was completed;
  - c. the date and time the deviation ended;
  - d. the total period of time (in minutes) during which there was a deviation;
  - e. the pressure drop and flow rate readings immediately after the corrective action was implemented; and
  - f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

These range(s) and/or limit(s) for the pressure drop and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

- (8) The permittee shall maintain records of the following information:
- a. the types of solvents employed in the cold cleaner, including the chemical name(s) and concentration;
  - b. the vapor pressure of each solvent applied, in pound per square inch absolute, measured at 100degrees Fahrenheit; and
  - c. the maximum temperature at which the solvent is maintained, if not maintained at room temperatures.

The records for the types of solvents employed during each year and the vapor pressure of each solvent at 100degrees Fahrenheit shall be maintained for at least 5 years and



shall be made available to the Director or his representative upon verbal or written request.

- (9) The permittee shall maintain records of the following information, collected at the end of each year:
- a. the total cleaning solvent added to the cold cleaner or the amount purchased for use in the emissions unit during the year;
  - b. the total amount of solvent collected for disposal and/or recovery and shipped off-site during the year; and
  - c. the estimated annual VOC emissions from this emissions unit, calculated using the difference between the solvent used or purchased and the used solvent shipped offsite, adjusting the units to calculate the emissions in tons/year.
- (10) 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 and/or anodizing tank(s), the permittee shall also maintain the following records:
- a. inspection records for the add-on air pollution control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards 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;
  - b. records of all maintenance performed on the tank(s), add-on air pollution control device, and monitoring equipment, except routine housekeeping practices;
  - c. records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment;
  - d. records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
  - e. 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);
  - f. test reports documenting results of all performance tests;
  - g. all measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance for multiple sources controlled by a common add-on air pollution control device in accordance with the special compliance procedures of 40 CFR 63.344(e);



- h. 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;
- i. the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment;
- j. the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment;
- k. the total process operating time of the chromium electroplating and/or anodizing tank(s) during the reporting period;
- l. 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.
- m. for each tank, records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the actual cumulative rectifier capacity is used to determine the facility size in accordance with 40 CFR 63.342(c)(2); and
- n. records of the date and time that fume suppressants are added to the electroplating or anodizing bath and records of the fume suppressant manufacturer and product name.

All records shall be maintained for a period of 5 years.

- (11) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart WWWW, including the following sections:

63.11509	Record Keeping Requirements
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e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:



- i. all exceedances of the 9.9 tons VOC per rolling, 365-day period for this emissions unit.
- b. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- c. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate district office or local air agency).

- (2) The permittee shall submit quarterly deviation reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber and/or the liquid flow rate was outside of the appropriate range or limit specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
  - c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the pressure drop and/or liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit.
- (3) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
- (4) The permittee shall submit quarterly reports documenting any period of time during which a solvent with a vapor pressure greater than 0.6 lb/in<sup>2</sup> absolute measured at



100degrees Fahrenheit was used or the solvent was heated above 120 degrees Fahrenheit (without meeting the control requirements of OAC rule 3745-21-09(O)(2)(c)); and any period of time during which the cold cleaner was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

- (5) The Initial Notification Reporting shall include the following information:
- a. the permittee's name, title, and address;
  - b. the address (i.e., physical location) or proposed address of the affected chromium electroplating and/or anodizing tank(s) if different from the permittee's;
  - c. a notification of intention to construct or make any physical or operational changes to an affected tank that may meet or has been determined to meet the criteria for a reconstruction as defined in 40 CFR 63.2;
  - d. 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;
  - e. identification of the applicable emission limitations and compliance date;
  - f. the expected commencement and completion dates of the construction or reconstruction, or the date of installation if installed;
  - g. the anticipated date of (initial) startup, or date of startup if installed;
  - h. a description of each tank and the type of process operation to be performed (hard or decorative chromium electroplating or chromium anodizing);
  - i. a description of the air pollution control method to be used to control emissions, such as preliminary design drawings and design capacity if an add-on air pollution control device is used;
  - j. an estimate of emissions based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emissions limits of 40 CFR, Part 63, Subpart N (calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations);
  - k. a statement that a fume suppressant containing a wetting agent will be used to demonstrate compliance with the surface tension limitation of the NESHAP; or a description of the air pollution control device that will be used to establish a site-specific surface tension limit for the tank;
  - l. the maximum potential cumulative potential rectifier capacity;
  - m. a statement of whether the tank(s) is/are located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum potential cumulative rectifier capacity; and



- n. a statement of whether the permittee will limit the maximum potential cumulative rectifier capacity, in accordance with 40 CFR 63.342(c)(2), such that the hard chromium electroplating facility is considered small.
- (6) 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.
- (7) The permittee shall submit a “Notification of Performance Test” or “Intent to Test” to the regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) at least 60 calendar days before the performance test is scheduled. The permittee shall notify the regulating agency as soon as practicable if the performance test cannot be conducted as scheduled, and shall specify the date it will be rescheduled (provisions of 40 CFR 63.7(b)(2)).
- (8) The permittee shall report, to the regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency), the results of any performance test conducted within 30 days of completion of such test. Reports of performance test results shall also be submitted in the “Notification of Compliance Status Report”, no later than 90 days following the completion of the performance test. Performance test results shall be documented in complete test reports that contain the following information:
- a. a brief description of the process;
  - b. a description of the sampling location(s);
  - c. a description of sampling and analytical procedures and any modifications to standard procedures;
  - d. the test results;
  - e. quality assurance procedures and results;
  - f. records of operating conditions during testing, preparation of standards, and calibration procedures;
  - g. raw data sheets for field sampling and field and laboratory analyses;
  - h. documentation of calculations;
  - i. any other information required by the test method; and
  - j. measurements and calculations to support the special compliance provisions for multiple sources controlled by a common add-on air pollution control device.

The permittee shall have sufficient data to establish the operating parameter value(s) that corresponds to compliance as required for continuous compliance monitoring.

- (9) The permittee shall submit a “Notification of Compliance Status Report” to the regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency), signed by the responsible official who shall certify its accuracy, attesting to whether the affected chromium electroplating and/or anodizing tank(s) is/are in compliance. The notification shall include the following information for each chromium electroplating tank subject to the NESHAP:



- a. the applicable emission limitation and the methods that were used to determine compliance with this limitation;
- b. the test report, documenting the results of the performance test and including the following elements:
  - i. a brief description of the process;
  - ii. a description of the sampling location(s);
  - iii. a description of sampling and analytical procedures and any modifications to the standard procedures;
  - iv. the test results;
  - v. quality assurance procedures and results;
  - vi. records of operating conditions during the test, preparation of standards, and calibration procedures;
  - vii. raw data sheets for field sampling and field and laboratory analyses;
  - viii. documentation of calculations; and
  - ix. any other information required by the test method.

(10) Within 60 days after the date of completing each performance test, as required by Part 63, Subpart N, the permittee shall submit the results of the performance tests, including any required fuel analyses, to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. For any performance test conducted using test methods that are not listed on the ERT Web site, the permittee shall submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

(11) The permittee shall comply with the applicable restrictions required under 40 CFR, Part 63, Subpart WWWW, including the following sections:

63.11508(a) and (c)	Notification and Reporting
63.11509(b), (c) and (d)	Notification and Reporting

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 Limitations:

0.046 lb PM<sub>10</sub>/hr, 0.20 ton PM<sub>10</sub>/yr

Applicable Compliance Method:

The hourly PM<sub>10</sub> emission limitation was established by multiplying the company supplied emission factor by 90% control efficiency of the wet scrubber or by 95% control efficiency of dry filtration. The annual limitation was established by multiplying the hourly limitation by 8760 hours/year, and then dividing by 2000 lbs/ton.

If required, compliance with the PM<sub>10</sub> limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 51, Appendix M, Methods 201/201A and 202. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).

b. Emission Limitations:

0.00000017lbBe/hr, 0.00000075tpy Be.

Applicable Compliance Method:

The hourly Be emission limitation was established by multiplying the company supplied emission factor by 90% control efficiency of the wet scrubber. The annual limitation was established by multiplying the hourly limitation by 8760 hours/year, and then dividing by 2000 lbs/ton.

If required, compliance with the Be limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 – 4, and 29 or 104. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.

c. Emission Limitation:

9.9 tons VOC per rolling, 365-day period

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the recordkeeping specified in d)(3).

d. Emission Limitation:

Coating usage in this emissions unit shall not exceed 10 gallons per day.

Applicable Compliance Method:

Compliance with the daily limit shall be based upon the recordkeeping specified in d)(1)c.

e. Emission Limitation:

Visible PE shall not exceed 5% opacity, as a six-minute average, from the stacks serving this emissions unit.



Applicable Compliance Method:

If required, compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- f. Emission Limitation: The surface tension shall not exceed one of the following:

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

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 or anodizing bath 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 Record keeping 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 and/or anodizing bath.
- 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 regulating agency shall be permitted to witness the measurement(s), upon request.
- iv. The permittee shall conduct continuous compliance monitoring as 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.

- g. Emission Limitation:  
0.015 mg/dscm ( $6.6 \times 10^{-6}$  gr/dscf)



Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements, in order to demonstrate compliance with the chromium emission limitation contained in this permit:

- i. The emission testing shall be conducted within 6 months of permit issuance and 6 months of permit expiration.
- ii. One of the following test methods shall be employed to demonstrate compliance:
  - (a) Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations", from Appendix A of Part 63, shall be used to determine the chromium concentration from the chromium electroplating tank(s), and testing must meet the following requirements:
    - (b) the sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively;
    - (c) Methods 306 and 306A allow the measurement of either total chromium or hexavalent chromium emissions;
    - (d) forchromic acid baths compliance must be demonstrated by measuring total chromium; and
    - (e) A minimum of three separate runs of the test method must be conducted in order to demonstrate compliance. All the applicable performance testing requirements of 40 CFR 63.7 must also be met; or
- iii. The California Air Resources Board (CARB) Method 425 shall be used to determine the chromium concentration from the electroplating tank(s) if the following conditions are met:
  - (a) If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33-66 micrograms of catch in the sampling train.
  - (b) If an Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses is used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).



- (c) A minimum of three separate runs of the test method must be conducted in order to demonstrate compliance. All the applicable performance testing requirements of 40 CFR 63.7 must also be met.
  - iv. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the tank(s) operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA's refusal to accept the results of the emission test(s).
  - v. Personnel from the regulating agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the tank(s) and the testing procedures provide a valid characterization of the emissions from the tank(s) and/or the performance of the control equipment.
  - vi. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the regulating agency within 30 days following completion of the test(s) and with the notification of compliance report. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the regulating agency.
- (2) The permittee shall quantify VOC emissions through a material balance test, conducted for a sufficient period of time to compute an average emission rate. The following procedures shall be implemented in order to perform this material balance test and document the average VOC emissions from this emissions unit, as follows:
- a. the degreaser tank shall be cleaned before testing begins;
  - b. records shall be maintained of the weight or volume of solvent used to initially fill the cleaning tank and the volume or weight of the make-up solvent added to the tank during the test period;
  - c. at the end of the test period (which can coincide with the normal solvent replacement cycle) the used solvent shall be pumped or drained out of the tank and the volume or weight measured using the same method applied in "b" above;
  - d. a record shall be maintained of the time (hours) passing between filling the tank with fresh solvent (start of test period) to the removal of the waste solvent, as well as, the number of parts or weight of the work load cleaned during the test period;



- e. a sample of the used solvent shall be analyzed for the percent oil, metal chips, and other contaminants (the oil and solvent proportions can be estimated by weighing samples of used solvent before and after boiling off the solvent);
- f. from the analysis of the used/waste solvent in f)(3)e., the volume or weight of oils, dissolved from the cleaned parts or work load, shall be documented;
- g. the total VOC emissions from the cleaning tank during the test period shall be calculated\* from the volume or weight of solvent displaced by the oil, plus the total makeup solvent added to the tank to the same initial fill line, and this volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the solvent; or
- h. if the final solvent line is below the initial solvent line in the tank when the waste solvent is pumped or drained out, the total VOC emissions from the cleaning tank during the test period shall equal the measured volume or weight of fresh solvent used to initially fill the tank, minus the total volume or weight of used solvent pumped/drained out, plus the volume or weight of solvent displaced by the oil (calculated in f)(3)e. above), plus the volume or weight of makeup solvent added to the tank during the test period, and this total volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the degreasing solvent; or
- i. as an alternative to the procedures for estimating VOC emission from the cleaning tank in f)(3)g. or f)(3)h. above, the VOC emissions may be calculated as the difference between the total volume of solvent added to the cleaning tank during the test period (the amount used to initially fill the tank and the makeup solvent added) and (minus) the solvent contained in the used solvent pumped or drained out; and this difference in volume or weight multiplied by the solvent density (pounds per gallon) or VOC concentration (weight percent) of the degreasing solvent;
- j. the average VOC emissions rate shall be calculated by dividing the total emissions calculated in f)(3)g., f)(3)h., or f)(3)i. by the total hours of the test period (and/or divided by the total parts cleaned during the test period if an emissions per production rate is required) as recorded in f)(3)d.; and
- k. if waste solvents pumped from the solvent cleaning tank are not immediately sealed to prevent evaporation and if a record is not maintained of the volume or amount sent offsite for recovery and/or disposal, such waste solvent losses shall be included with those calculated above in any required emissions report(s) if it cannot be demonstrated that this volume of material has been properly recovered or disposed of and/or has not been lost through evaporation to the atmosphere.

\* If solvent measurements are recorded by volume the density of the solvent shall be used to convert gallons to pounds.



g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit-to-install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit-to-install.
- (2) The following are the housekeeping requirements identified in 40 CFR 63.342 as referenced in the Operation and Maintenance plan outlined in c)(2):

**TABLE 2 TO §63.342—HOUSEKEEPING PRACTICES**

For	You must:	At this minimum frequency
1. Any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium	(a) Store the substance in a closed container in an enclosed storage area or building; AND (b) Use a closed container when transporting the substance from the enclosed storage area	At all times, except when transferring the substance to and from the container. Whenever transporting substance, except when transferring the substance to and from the container.
2. Each affected tank, to minimize spills of bath solution that result from dragout. Note: this measure does not require the return of contaminated bath solution to the tank. This requirement applies only as the parts are removed from the tank. Once away from the tank area, any spilled solution must be handled in accordance with Item 4 of these housekeeping measures	(a) Install drip trays that collect and return to the tank any bath solution that drips or drains from parts as the parts are removed from the tank; OR (b) Contain and return to the tank any bath solution that drains or drips from parts as the parts are removed from the tank; OR (c) Collect and treat in an onsite wastewater treatment plant any bath solution that drains or drips from parts as the parts are removed from the tank	Prior to operating the tank. Whenever removing parts from an affected tank. Whenever removing parts from an affected tank.
3. Each spraying operation for removing excess chromic acid from parts removed from, and occurring over, an affected tank	Install a splash guard to minimize overspray during spraying operations and to ensure that any hexavalent chromium laden liquid captured by the splash guard is returned to the affected chromium electroplating or anodizing tank	Prior to any such spraying operation.
4. Each operation that involves the handling or use of any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium	Begin clean up, or otherwise contain, all spills of the substance. Note: substances that fall or flow into drip trays, pans, sumps, or other containment areas are not considered	Within 1 hour of the spill.



For	You must:	At this minimum frequency
	spills	
5. Surfaces within the enclosed storage area, open floor area, walkways around affected tanks contaminated with hexavalent chromium from an affected chromium electroplating or chromium anodizing tank	(a) Clean the surfaces using one or more of the following methods: HEPA vacuuming; Hand-wiping with a damp cloth; Wet mopping; Hose down or rinse with potable water that is collected in a wastewater collection system; Other cleaning method approved by the permitting authority; OR (b) Apply a non-toxic chemical dust suppressant to the surfaces	At least once every 7 days if one or more chromium electroplating or chromium anodizing tanks were used, or at least after every 40 hours of operating time of one or more chromium electroplating or chromium anodizing tank, whichever is later. According to manufacturer's recommendations.
6. All buffing, grinding, or polishing operations that are located in the same room as chromium electroplating or chromium anodizing operations	Separate the operation from any affected electroplating or anodizing operation by installing a physical barrier; the barrier may take the form of plastic strip curtains	Prior to beginning the buffing, grinding, or polishing operation.
7. All chromium or chromium-containing wastes generated from housekeeping activities	Store, dispose, recover, or recycle the wastes using practices that do not lead to fugitive dust and in accordance with hazardous waste requirements	At all times.