



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

7/7/2016

Certified Mail

Brian Smith
Tenneco Automotive Operating Company, Inc.
2555 Woodman Drive
Kettering, OH 45420

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: 0857080148
Permit Number: P0120893
Permit Type: Initial Installation
County: Montgomery

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**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/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 by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Regional Air Pollution Control Agency at (937)225-4435 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: RAPCA



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Tenneco Automotive Operating Company, Inc.**

Facility ID:	0857080148
Permit Number:	P0120893
Permit Type:	Initial Installation
Issued:	7/7/2016
Effective:	7/7/2016
Expiration:	1/28/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
Tenneco Automotive Operating Company, Inc.

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Final Permit-to-Install and Operate
Tenneco Automotive Operating Company, Inc.
Permit Number: P0120893
Facility ID: 0857080148
Effective Date: 7/7/2016

Authorization

Facility ID: 0857080148
Application Number(s): A0056030
Permit Number: P0120893
Permit Description: Installation of two (2) open surface hard chromium electroplating lines to plate shock absorber rods controlled with a packed-bed scrubber.
Permit Type: Initial Installation
Permit Fee: \$400.00
Issue Date: 7/7/2016
Effective Date: 7/7/2016
Expiration Date: 1/28/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Tenneco Automotive Operating Company, Inc.
2555 Woodman Drive
Kettering, OH 45420

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:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

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



Authorization (continued)

Permit Number: P0120893

Permit Description: Installation of two (2) open surface hard chromium electroplating lines to plate shock absorber rods controlled with a packed-bed scrubber.

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

Group Name: Hard chrome plating tanks

Emissions Unit ID:	P125
Company Equipment ID:	#1 DynaChrome Plater
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P126
Company Equipment ID:	#2 DynaChrome Plater
Superseded Permit Number:	
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate
Tenneco Automotive Operating Company, Inc.
Permit Number: P0120893
Facility ID: 0857080148
Effective Date: 7/7/2016

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
Tenneco Automotive Operating Company, Inc.
Permit Number: P0120893
Facility ID: 0857080148
Effective Date: 7/7/2016

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. 40 CFR Part 63, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

The following emissions unit contained in this permit is subject to 40 CFR Part 63, Subpart N National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks: P125 and P126. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office or Local Air Agency. This facility is classified as a non-major (area) source and US EPA determined that areas sources subject to this rule are exempt from Title V permitting requirements



Final Permit-to-Install and Operate
Tenneco Automotive Operating Company, Inc.
Permit Number: P0120893
Facility ID: 0857080148
Effective Date: 7/7/2016

C. Emissions Unit Terms and Conditions



1. Emissions Unit Group -Hard chrome plating tanks: P125 and P126.

EU ID	Operations, Property and/or Equipment Description
P125	Hard chromium electroplating line to plate shock absorber rods with packed bed scrubber control system
P126	Hard chromium electroplating line to plate shock absorber rods with packed bed scrubber control system

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-03(A)(3) June 30, 2008	For Emissions units P125 and P126 individually: The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to 40 CFR Part 63, Subpart N. See b)(1)c. and b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(iii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the potential to emit for particulate is less than 10 tons/year. See b)(2)b. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR 63.342(c)(1)(iv) (40 CFR Part 63, Subpart N – National Emissions Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks)	The permittee shall not allow the concentration of total chromium emissions in the exhaust gas stream discharged from the open surface, hard chromium electroplating operation(s) to exceed 0.006 mg/dscm (2.6x10 ⁻⁶ gr/dscf). This limitation also applies during startup and shutdown operations.
d.	40 CFR 63.1 through 15 (40 CFR Part 63, Subpart A – National Emissions Standards for Hazardous Air Pollutants: General Provisions)	Table 1 to Subpart N of 40 CFR Part 63 – General Provisions Applicability to Subpart N shows which parts of the General provisions in 40 CFR 63.1 through 15 apply.
e.	OAC rule 3745-17-11(B)(1)	The emissions limitation established by this rule is less stringent than the emissions limitation established by 40 CFR, Part 63, Subpart N.
f.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average except as specified by rule.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. This rule paragraph applies once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(iii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. 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.

c) Operational Restrictions

- (1) 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.
- (2) 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 the 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).
- (3) The operation and maintenance plan shall incorporate the following work practice standards for the packed-bed scrubber control; the plan shall provide procedures for:
- a. quarterly visual inspections of the packed-bed scrubber to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device;
 - b. quarterly visual inspections of the back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist;

- c. quarterly visual inspections of the ductwork from the tank to the packed-bed scrubber to ensure there are no leaks; and
- d. adding fresh makeup water to the top of the packed bed, where “top” is defined for horizontal-flow and vertical-flow scrubbers in footnote “b” of Table 1; or if greater than 50% of the scrubber water is drained (e.g., for maintenance), makeup water may be added to the scrubber basin.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In addition to fulfilling all record keeping requirements contained in the General Provisions to 40 CFR Part 63, Subpart A, as they apply to the chromium electroplating 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 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.

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

- (2) The permittee shall perform the following monitoring and record keeping requirements in order to demonstrate compliance through the use of the packed-bed scrubber system:
 - a. During the initial performance test, the permittee shall determine the outlet chromium concentration using Methods 306 or 306A from Appendix A of Part 63 or The California Air Resources Board (CARB) Method 425 and in accordance with the procedures identified in 40 CFR 63.344(c). The pressure drop across the packed-bed scrubber system and the velocity pressure at the common inlet of the scrubber shall be established as site-specific operating parameters, setting the values that correspond to compliance with the applicable emission limitations, as established during performance test using procedures in 40 CFR 63.344(d)(4) and (5).
 - b. The permittee may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the permittee may set as the compliant values the average pressure drop and average inlet velocity pressure measured over the three test runs of one performance test, and accept ± 1 inch of water column from the pressure drop value and ± 10 percent from the velocity pressure value as the compliant ranges.
 - c. On and after the date on which the initial performance test is required to be completed under 40 CFR 63.7, the permittee shall monitor and record the velocity pressure at the inlet to the packed-bed scrubber and the pressure drop across the scrubber system once each day that the tank(s) is/are in operation; or the permittee may install a continuous pressure monitoring system as allowed per 40 CFR 63.343(c). To be in compliance, the scrubber system shall be operated within ± 10 percent of the velocity pressure value established during the initial performance test, and within ± 1 inch of water column of the pressure drop value established during compliance performance testing, or within the range of compliant operating parameter values established during multiple performance tests.

e) Reporting Requirements

- (1) 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.
- (2) 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)).
- (3) 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;
 - 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.

- (4) 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). 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> BAT is compliance with). 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.

- (5) 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 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;
 - ix. any other information required by the test method;
 - c. if multiple tank(s) are controlled by a common add-on air pollution control device, the calculations used to demonstrate compliance for multiple sources controlled by a common add-on air pollution control device, i.e., the type and quantity of hazardous air pollutants emitted by each emission unit, using the special provisions of 40 CFR 63.344(e), reported in mg/dscm or mg/hr;
 - d. the rectifier capacity of the tank;

- e. 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 emission limit;
- f. the methods that shall be used to determine continuous compliance;
- g. a description of the air pollution control method(s) used for each emission point;
- h. 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
- i. a statement by the permittee as to whether the tank 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. Reports of performance test results shall be submitted in the "Notification of Compliance Status Report" no later than 90 days following the completion of the compliance demonstration required by 40 CFR 63.7 and 40 CFR 63.343(b). Sources not required to complete a performance test shall submit the compliance status report no later than 30 days following the applicable compliance date identified in 40 CFR 63.343(a).

- (6) 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 regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) upon request. This report shall include the following:
 - a. the company name and address of the chromium electroplating tank(s);
 - b. 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;
 - c. an identification of the operating parameter(s) that is/are/shall be monitored for compliance determination;
 - d. the relevant emission limitation for the tank(s), and the operating parameter value(s), or range of values, established during compliance testing and reported in the notification of compliance status report(s);
 - e. the beginning and ending dates of the reporting period;
 - f. the total operating time of the chromium electroplating tank(s) during the reporting period;
 - g. a summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total operating time during that reporting period; and a breakdown of the total duration of excess

emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;

- h. a certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the tank(s);
 - i. if the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit;
 - j. a description of any changes in monitoring, processes, or controls since the last reporting period;
 - k. the 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;
 - l. the date of the report;
 - m. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and
 - n. the report shall be completed annually and retained on site, and made available to the regulating agency upon request.
- (7) 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 regulating agency (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) if either of the following conditions are met:
- a. the total duration of excess emissions is 1% or greater of the total operating time for the reporting period; or
 - b. the total duration of malfunctions of the add-on air pollution control device and/or monitoring equipment is 5% or greater of the total operating time.

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

- (8) Based on which measures accurately assess the compliance status of the chromium electroplating tank(s) located at the area source, the regulating agency (appropriate DAPC district or local office) 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 agency or can be retained onsite.

- (9) 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:
- a. for 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected tank is in compliance with the relevant emission limit;
 - b. the permittee continues to comply with all applicable record keeping and monitoring requirements of 40 CFR Part 63, Subparts A and N; and
 - c. the regulating agency does not object to a reduced reporting frequency.

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 regulating agency in writing of the intention to make the change and the same agency does not object. In deciding whether to approve a reduced reporting frequency or to allow the report to be retained on site, the Ohio EPA regulating agency may request to review information concerning the facility’s previous performance history during the 5-year record keeping period prior to the intended change in reporting frequency, or the record keeping 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 regulating agency will notify the permittee in writing within 45 days after receiving notice. This notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

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.

- (10) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (11) The reports required by this permit may be submitted through the Ohio EPA’s eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

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

a. Emission Limitation:

The permittee shall not allow the concentration of total chromium in the exhaust gases discharged from the open surface, hard chromium electroplating operations to exceed 0.006 mg/dscm (2.6×10^{-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 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
- 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) for chromic 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.
- b. Emission Limitation:
- Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with procedures specified in OAC rule 3745-17-03(B)(1) using the methods and procedures specified in U.S. EPA Reference Method 9.

- (2) The permittee shall measure the pressure drop across the add-on air pollution control device in accordance with the following guidelines:
- a. Specifications for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with the manufacturer's accuracy specifications.
 - b. Pressure taps shall be installed at any of the following locations:
 - i. at the inlet and outlet of the control system (the inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower);
 - ii. on each side of the packed bed within the control system or on each side of each mesh pad within the control system; and
 - iii. on the front side of the first mesh pad and back side of the last mesh pad within the control system.
 - c. Pressure taps shall be sited at locations that are:
 - i. as free from pluggage as possible and away from any flow disturbances such as cyclonic demisters; and
 - ii. situated such that no air infiltration at the measurement site will occur that could bias the measurement;
 - d. pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials;
 - e. nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop;
 - f. any of the following pressure gauges may be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer;
 - g. prior to connecting any pressure lines to the pressure gauge(s), each gauge shall be zeroed (calibration of the pressure gauges is not required, with every required reading); and



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h. all monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected tank(s) are obtained. Verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written accuracy specifications or recommendations for installation, operation, and calibration of the system(s).

g) Miscellaneous Requirements

(1) None.