



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

6/21/2016

Certified Mail

Mrs. Diane Walsh  
 Eaton Industrial Corporation  
 23555 Euclid Avenue  
 Cleveland, OH 44117

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: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1318207468  
 Permit Number: P0120410  
 Permit Type: Administrative Modification  
 County: Cuyahoga

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Plain Dealer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically 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. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall and Cleveland Division of Air Quality  
 Permit Review/Development Section 2nd Floor  
 Ohio EPA, DAPC 75 Erieview Plaza  
 50 West Town Street Suite 700 Cleveland, OH 44114  
 PO Box 1049  
 Columbus, Ohio 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

Michael E. Hopkins, P.E.  
 Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification  
 CDAQ; Pennsylvania; Canada



## PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: [HClerk@epa.ohio.gov](mailto:HClerk@epa.ohio.gov)

Draft Air Pollution Permit-to-Install and Operate Administrative Modification  
Eaton Industrial Corporation

23555 Euclid Avenue,, Euclid, OH 44117-1795

ID#:P0120410

Date of Action: 6/21/2016

Permit Desc:Administrative modification to accommodate a replacement control device for EUs P034 and P035. The company has chosen to replace the existing scrubber in order to meet new federal regulations for chrome platers under MACT Subpart N. Emissions units P038 and P049 to P059 were included in this modification for consistency. The terms and conditions for these units remain unchanged..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: David Hearne, Cleveland Division of Air Quality, 2nd Floor 75 Erieview Plaza, Cleveland, OH 44114. Ph: (216)664-2297





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Eaton Industrial Corporation**

Facility ID:	1318207468
Permit Number:	P0120410
Permit Type:	Administrative Modification
Issued:	6/21/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Eaton Industrial Corporation

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**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 1318207468  
Application Number(s): A0054951  
Permit Number: P0120410  
Permit Description: Administrative modification to accommodate a replacement control device for EUs P034 and P035. The company has chosen to replace the existing scrubber in order to meet new federal regulations for chrome platers under MACT Subpart N. Emissions units P038 and P049 to P059 were included in this modification for consistency. The terms and conditions for these units remain unchanged.  
Permit Type: Administrative Modification  
Permit Fee: \$200.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 6/21/2016  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Eaton Industrial Corporation  
23555 Euclid Avenue  
Euclid, OH 44117-1795

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0120410

Permit Description: Administrative modification to accommodate a replacement control device for EUs P034 and P035. The company has chosen to replace the existing scrubber in order to meet new federal regulations for chrome platers under MACT Subpart N. Emissions units P038 and P049 to P059 were included in this modification for consistency. The terms and conditions for these units remain unchanged.

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>P034</b>
Company Equipment ID:	Hard Chrome Plating controlled by composite mesh pad
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P035</b>
Company Equipment ID:	Decorative Chrome & Chrome Anodizing
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P038</b>
Company Equipment ID:	Boost Pump Lab Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P049</b>
Company Equipment ID:	Boost Pump Lab Modification
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P050</b>
Company Equipment ID:	Production Test Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P051</b>
Company Equipment ID:	Production Test Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P052</b>
Company Equipment ID:	Production Test Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P053</b>
Company Equipment ID:	Engineering Test Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P054</b>
Company Equipment ID:	Engineering Test Cells
Superseded Permit Number:	P0103900
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

**Emissions Unit ID:**

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

**P055**

Engineering Test Cells

P0103900

Not Applicable

**Emissions Unit ID:**

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

**P056**

Dry Film Preparation and Application

P0103900

Not Applicable

**Emissions Unit ID:**

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

**P059**

Reference Test Cells

P0103900

Not Applicable



**Draft Permit-to-Install and Operate**  
Eaton Industrial Corporation  
**Permit Number:** P0120410  
**Facility ID:** 1318207468  
**Effective Date:** To be entered upon final issuance

## **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 Cleveland Division of Air Quality in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by 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



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

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.



**Draft Permit-to-Install and Operate**  
Eaton Industrial Corporation  
**Permit Number:** P0120410  
**Facility ID:** 1318207468  
**Effective Date:** To be entered upon final issuance

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



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

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.
2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart N, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks: P034 and P035. The complete NESHAP requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at [www.ecfr.gov](http://www.ecfr.gov) by contacting the Cleveland Division of Air Quality (CDAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 63, Subpart N. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart N. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart N, and Subpart A.
3. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart *WWWWW*, National Emission Standards for Hazardous Air Pollutants (NESHAP) for *WWWWW* Area Sources. Although Ohio EPA has determined that this Generally Available Control Technology NESHAP (GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>.



**Draft Permit-to-Install and Operate**  
Eaton Industrial Corporation  
**Permit Number:** P0120410  
**Facility ID:** 1318207468  
**Effective Date:** To be entered upon final issuance

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

**1. Chrome Plating Tanks: P034**

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

Hard Chrome Plating controlled by composite mesh pad.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Total Chromium emissions shall not exceed 0.013 TPY.  The requirements of this rule include compliance with 40 CFR Part 63, Subpart N.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)a. below.
c.	OAC rule 3745-17-11	The particulate emission limit specified by this rule is less stringent than the emission limit established by 40 CFR Part 63, Subpart N.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart N [In accordance with 40 CFR 63.340 this emission unit is an existing hard chrome electroplating tank subject to the emissions limitations/control measures specified in this section.]	Total chromium emissions shall not exceed 0.015 mg/dscm ( $6.6 \times 10^{-6}$ gr/dscf). See c)(2), d)(1), e)(3), and f)(2) below.
e.	40 CFR 63.1-16	Table I to Subpart N of 40 CFR Part 63 – Applicability of General Provisions to Subpart N shows which parts of the General Provisions in 40 CFR 63.1-16 apply.

(2) Additional Terms and Conditions

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

c) Operational Restrictions

- (1) In accordance with 40 CFR Part 63.343(c)(1), the packed-bed scrubber/composite mesh-pad shall be operated with pressure drops within  $\pm 2$  inches of water column of the pressure drop values established during the most recent stack test that demonstrated compliance.
- (2) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(b)	Applicability of emissions limitations.
63.342(c)	Total chromium concentration in exhaust gas stream limit.
63.342(f)	Operation and maintenance practices and plan requirements, including requirements identified in Table 1 of §63.342.
63.342(g)	Chromic acid baths shall not be reduced from hexavalent to trivalent.

d) Monitoring and/or Recordkeeping Requirements

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

63.343(a)	Compliance dates.
63.343(b)	Methods to demonstrate initial compliance.
63.343(c)	Monitoring and recording pressure drop to demonstrate continuous compliance.
63.346(a)	Fulfill all record keeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Shall maintain records for a period of 5 years in accordance with §63.10(b)(1).
Table 1 to §63.342	Summary of operation and maintenance practices.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the mesh-pad system during the 12-month reporting period for this/these emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop was outside of the appropriate range or exceeded the applicable limit contained in this permit;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the composite mesh-pad system;
  - c. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the pressure drop into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken.

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

63.347(a)	Fulfill all reporting requirements identified in Subpart N and the applicable portions of Subpart A.
63.347(b)	Reporting requirements applicability.
63.347(c)	Initial notifications.
63.347(d)	Notification of performance test.
63.347(e)	Notification of compliance status.
63.347(f)	Reports of performance test results.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).

f) Testing Requirements

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

a. Emission Limitation

Total chromium emissions shall not exceed 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:

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

b. Emission Limitation

Total chromium emissions shall not exceed 0.013 TPY.



Applicable Compliance Method

Compliance with the above emission limitation shall be determined for each emissions unit by the following equation (based on AP-42, 5<sup>th</sup> Edition, Vol 1, Chapter 12.20, Electroplating):

$$Ea = (Ef) \times (Rc) \times (1 \text{ lb}/7000 \text{ grains}) \times (100 \text{ dscf}/A\text{-hr}) \times (Hr) \times (1 \text{ ton}/ 2000 \text{ lbs})$$

Where:

Ea = actual annual chromium emissions (ton per year)

Ef = emission factor for hard Chromium electroplating line with composite mesh-pad mist eliminator ( $3.8 \times 10^{-6}$  gr/dscf) AP-42 Section 12.20, Table 12.20-1.

Rc = rectifier capacity in amps (A), maximum of 1,500 amps per tank, two tanks in Chrome Plating.

Hr = operating hours per year when rectifier is ON and parts are in the tank being plated.

c. Emission Limitation:

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

Applicable Compliance Method:

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

- (2) The permittee shall comply with the applicable testing methods under 40 CFR, Part 63 Subpart N, including the following sections:

63.344(a)	Performance test requirements.
63.344(c)	Test methods in accordance with §63.343(c)(1).
63.344(d)	Site specific operating parameter values.
63.344(e)	Emission limitation for multiple sources sharing pollution control device.

- (3) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after start-up.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of chromium in the exhaust stream.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 306 or Method 306A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst case" conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 12/1/1990.



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

- (2) Superseded permits include P0103900, issued 9/20/2012, and P0060111, issued 8/12/1994.

**2. P035 - Decorative Chrome Anodizing & Anodizing with Aluminum Etching**

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

P035 – Decorative Chrome & Chromium Anodizing with Aluminum Etching controlled by a fiber bed mist eliminator and scrubber

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Total chromium emissions shall not exceed 0.013 TPY.  The requirements of this rule include compliance with 40 CFR Part 63, Subpart N.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)a. below.
c.	OAC rule 3745-17-11	The particulate emission limit specified by this rule is less stringent than the emission limit established by 40 CFR Part 63, Subpart N.



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart N	Total chromium emissions shall not exceed 0.007 mg/dscm ( $3.1 \times 10^{-6}$ gr/dscf). See c)(2), d)(1), e)(3), and f)(2) below.
e.	40 CFR 63.1-16	Table I to Subpart N of 40 CFR Part 63 – Applicability of General Provisions to Subpart N shows which parts of the General Provisions in 40 CFR 63.1-16 apply.

(2) Additional Terms and Conditions

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

c) Operational Restrictions

- (1) In accordance with 40 CFR Part 63.343(c)(1), the packed-bed scrubber/composite mesh-pad system shall be operated with pressure drops within  $\pm 2$  inches of water column of the pressure drop values established during the most recent stack test that demonstrated compliance.
- (2) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63 Subpart N, including the following sections:

63.342(b)	Applicability of emissions limitations.
63.342(d)	Total chromium concentration in exhaust gas stream limit.
63.342(f)	Operation and maintenance practices and plan requirements, including requirements identified in Table 1 of §63.342.
63.342(g)	Chromic acid baths shall not be reduced from hexavalent to trivalent.

d) Monitoring and/or Recordkeeping Requirements

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



63.343(a)	Compliance dates.
63.343(b)	Methods to demonstrate initial compliance.
63.343(c)	Monitoring and recording pressure drop to demonstrate continuous compliance.
63.346(a)	Fulfill all record keeping requirements identified in Subpart N including the applicable portions of Subpart A.
63.346(b)	Maintain required records.
63.346(c)	Shall maintain records for a period of 5 years in accordance with §63.10(b)(1).
Table 1 to §63.342	Summary of operation and maintenance practices.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA’s “e-Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the mist eliminator/scrubber system during the 12-month reporting period for this/these emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop was outside of the appropriate range or exceeded the applicable limit contained in this permit;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the mist eliminator/scrubber system;
  - c. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken.
- (3) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63 Subpart N, including the following sections:



63.347(a)	Fulfill all reporting requirements identified in Subpart N and the applicable portions of Subpart A.
63.347(b)	Reporting requirements applicability.
63.347(c)	Initial notifications.
63.347(d)	Notification of performance test.
63.347(e)	Notification of compliance status.
63.347(f)	Reports of performance test results.
63.347(h)	Ongoing compliance status reports for area sources in accordance with §63.347(g)(3).

f) Testing Requirements

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

a. Emission Limitation

Total chromium emissions shall not exceed 0.007 mg/dscm ( $3.1 \times 10^{-6}$  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:

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

b. Emission Limitation

Total chromium emissions shall not exceed 0.013 TPY.

Applicable Compliance Method

Compliance with the above emission limitation shall be determined for each emissions unit by the following equation (based on most recent stack test):



$$E_a = (E_f) \times (1 \text{ lb}/7000 \text{ grains}) \times (21.89 \text{ ft}^2) \times (\text{Hrs}/\text{yr}) \times (1 \text{ ton}/ 2000 \text{ lbs})$$

Where:

$E_a$  = actual annual total chromium emissions (ton per year)

$E_f$  = emission factor for anodize chromium line with fiber bed mist eliminator AP-42 Section 12.20, Table 12.20-2 (0.00054 gr/hr-ft<sup>2</sup>)

$H_r$  = operating hours per year (operating is when the tank contains parts being coated and the tank has the rectifier ON.)

c. Emission Limitation:

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

Applicable Compliance Method:

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

- (2) The permittee shall comply with the applicable testing methods under 40 CFR, Part 63 Subpart N, including the following sections:

63.344(a)	Performance test requirements.
63.344(c)	Test methods in accordance with §63.343(c)(1).
63.344(d)	Site specific operating parameter values.
63.344(e)	Emission limitation for multiple sources sharing pollution control device.

- (3) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 3 months after start-up.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of chromium in the exhaust stream.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 306 or Method 306A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute “worst case”. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
- (1) This emissions unit was installed on 12/1/1990.
  - (2) Superseded permits include P0103900, issued 9/20/2012, and P0060112, issued 8/12/1994.

**3. P038 - Production testing of jet fuel pumps**

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

P038 - Boost Pump Lab test stands, connected to up to three (3) large vacuum pumps ducted to the flare stack.

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 3745-31-05(A)(3)	VOC emissions shall not exceed 7.3 TPY total for P038. See b)(2)b. below.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	The VOC control requirements of this rule are less stringent than the VOC control requirements established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The total VOC emissions from P038 shall not exceed 40 lbs VOC/day as a monthly average.

- b. Emissions unit P038 shall be vented to a flare that achieves a 99.5% VOC destruction efficiency.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month of operation for the total emissions from P038:
    - a. the hours of operation for P038;
    - b. the total volatile organic compound emission rate for P038, in pounds per month, determined in accordance with f)(1)b.;
    - c. the number of days of operation; and
    - d. the average daily volatile organic compound emissions from P038, determined by dividing d)(1)b. by d)(1)c., in pounds per day.
  - (2) The permittee shall properly operate, and maintain a device to continuously monitor the pilot flame when the emissions unit P038 is in operation. The monitoring device and any recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
  - (3) The permittee shall monitor the flare for emissions unit P038 to ensure that it is operated and maintained in conformance with its design and the requirements contained in this permit.
  - (4) The permittee shall record all periods of time during which there was no pilot flame or the flare was inoperable.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
  - (2) The permittee shall include in the annual PER information that identify all periods of time during which the pilot flame was not functioning properly or the flare was not maintained as required in this permit. The reports shall include the date, time, and duration of each such period.

f) Testing Requirements

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

a. Emission Limitation

VOC emissions shall not exceed 7.3 TPY VOC total from P038.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the total monthly emissions for each calendar year and divide by 2,000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 40 lbs VOC/day total from P038.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculations:

Stack testing performed on January 10, 1994 for emissions unit P038 determined a controlled emission rate of 17.4 lbs OC/hr. Therefore, compliance shall be determined by multiplying this controlled emission rate by the actual hours of operation per month the emissions unit is operating and then divide by the number of days of operation per month.

g) Miscellaneous Requirements

(1) Emissions unit is used an average of 4 hours/year.

(2) This emissions unit was installed on 9/1/1994.

(3) Superseded permits include P0103900, issued 9/20/2012, and P0060115, issued 11/10/1994.

**4. P049 - Boost Pump Lab Cells & Boost Pump Lab Modification**

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

P049 - Boost Pump Lab test stands, connected to up to three (3) small vacuum pumps.

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 3745-31-05(A)(3) PTI 13-3424 issued July 21, 1999	VOC emissions shall not exceed 1.6TPY.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The total combined VOC emissions from P049 shall not exceed 8.72 lbs VOC/day as a monthly average.

b. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.

- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month of operation for the total emissions from P049:
    - a. the company identification for each material employed;
    - b. the amount, in gallons, of each material employed;
    - c. the hours of operation at elevated temperature or under vacuum; and
    - d. the total volatile organic compound emission rate for all materials, in pounds per month, determined in accordance with f)(1)b. below;
    - e. the number of days of operation; and
    - f. the average daily volatile organic compound emissions from P049, determined by dividing d)(1)d. by d)(1)e, in pounds per day.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
  - (2) The permittee shall include in the annual PER information that identify all periods of time during which the pilot flame was not functioning properly or the flare was not maintained as required in this permit. The reports shall include the date, time, and duration of each such period.
- f) Testing Requirements
  - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation  
VOC emissions shall not exceed 1.6 TPY VOC from P049.



Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the total monthly emissions for each calendar year and divide by 2,000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 8.72 lbs VOC/day from P049 as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation:

- i. Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted), and the emissions from specialty test (under vacuum and potentially heated) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC/day} * \text{number of operating days/month}) + (\text{gal/month} * 6.6 \text{ lbs VOC/gal} * 0.05 * 0.20)] + [\text{Specialty Test Emissions factor} * \text{hours of operation/month}]$$

Specialty Emissions Factors:

JP-4 or F-40 Fuel at 80 degrees F = 4.7 lb/hr emissions VOC

F-40 Fuel at 160 degrees F = 6.7 lb/hr emissions VOC

JP-8 Fuel at 80 degrees F = 0.06 lb/hr emissions VOC

JP-8 Fuel at 160 degrees F = 0.528 lb/hr emissions VOC

The specialty emission factors were developed from engineering estimates performed by the permittee.

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 1/1/1966.
- (2) Superseded permits include P0103900, issued 9/20/2012, and PTI #13-3424, issued 11/23/1998.



**5. P050 - Production Test Cells**

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

P050 - Bldg 30, (9 test cells total); production testing of jet fuel pumps.

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 3745-31-05(A)(3) PTI 13-3424 issued July 21, 1999 for P050	VOC emissions shall not exceed 1.42 TPY
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 7.78 lbs VOC/day as a monthly average.

b. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.

- c. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month for each emissions unit:
    - a. the company identification for each material employed;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the number of days of operation;
    - d. the volatile organic compound emission rate for all materials, in pounds per month, determined in accordance with f)(1)b. below for each test cell;
    - e. the total VOC emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells), in pounds per month; and
    - f. the average daily volatile organic compound emission rate for all materials, in pounds per day, determined by dividing d(1)e. by d)(1)c.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
  - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation

VOC emissions shall not exceed 1.42 TPY VOC.



Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1). The annual emissions shall be determined by summing the monthly emissions for each calendar year and dividing by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 7.78 lbs VOC/day for P050 as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell:

Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), and the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)]$$

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 1/1/1980.
- (2) Superseded permits include P0103900, issued 9/20/2012, and PTI #13-3424, issued 11/23/1998.

**6. P051, Production Test Cells**

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

P051 - Bldg 33, (4 test cells total); production testing of jet fuel pumps.

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 3745-31-05(A)(3)	VOC emissions shall not exceed 21.7 TPY, including cleanup, from the emissions unit.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 118.9 lbs VOC/day as a monthly average including cleanup materials

b. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.

- c. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month:
    - a. the company identification for each material employed;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the number of days of operation;
    - d. the volatile organic compound emission rate for all materials, in pounds per month, determined in accordance with f)(1)b. below for each test cell;
    - e. the total VOC emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells), in pounds per month; and
    - f. the average daily volatile organic compound emission rate for all materials, in pounds per day, determined by dividing d(1)e. by d)(1)c.
  - (2) The permittee shall collect and record the following information for each month:
    - a. the company identification for each cleanup material employed;
    - b. the number of gallons of each cleanup material employed;
    - c. the volatile organic compound content of each cleanup material, in pounds per gallon; and
    - d. the total volatile organic compound emission rate for all cleanup materials, in pounds per month, determined in accordance with f)(1)b. below.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

f) Testing Requirements

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

a. Emission Limitation

VOC emissions shall not exceed 21.7 TPY VOC from the emissions unit, including cleanup.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) and d)(2). The annual emissions shall be determined by summing the monthly emissions for each calendar year and dividing by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 118.9 lbs VOC/day for each emissions unit as a monthly average including clean up materials.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and d)(2) and using the following calculation for each test cell:

Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), and the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)]$$

Cleanup emissions have been estimated to be based on a 50% evaporation rate.

$$\text{lbs VOC/month (cleanup)} = (\text{gals/month}) * (\text{lbs VOC}/\text{gal}) * 0.5$$

$$\text{Total VOC emissions} = \text{lbs VOC/month from fuel throughput} + \text{lbs VOC/month from cleanup}$$

g) Miscellaneous Requirements

(1) This emissions unit was installed on 1/1/1956.

(2) Superseded PTIO P0103900, issued 9/20/2012.



**7. P052, Production Test Cells**

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

P052 - Bldg 31, (1 test cell total); production testing of jet fuel pumps.

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 3745-31-05(A)(3) PTI 13-3424 issued July 21, 1999 for P050	VOC emissions shall not exceed 0.83 TPY.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 4.55 lb/day VOC as a monthly average.

b. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.

- c. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month for each emissions unit:
    - a. the company identification for each material employed;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the number of days of operation;
    - d. the volatile organic compound emission rate for all materials, in pounds per month, determined in accordance with f)(1)b. below for each test cell;
    - e. the total VOC emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells), in pounds per month; and
    - f. the average daily volatile organic compound emission rate for all materials, in pounds per day, determined by dividing d)(1)e. by d)(1)c.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
  - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation

VOC emissions shall not exceed 0.83 TPY VOC.



Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1). The annual emissions shall be determined by summing the monthly emissions for each calendar year and dividing by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 4.55 lb/day VOC as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell:

Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), and the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)]$$

g) **Miscellaneous Requirements**

- (1) This emissions unit was installed on 1/1/1978.
- (2) Superseded PTIO P0103900, issued 9/20/2012.

**8. P053 - Engineering Test Cells**

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

P053 - Bldg 33, (8 test cells total); engineering testing of jet fuel pumps.

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 3745-31-05(A)(3) PTI 13-3424 issued on 7/21/1999	VOC emissions shall not exceed 11.27 TPY.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)c. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 61.75 lbs/day as a monthly average.

b. These emissions units are used as a batch operation. Each test cell operates at a maximum of 3.65 batches/year.

- c. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.
    - d. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
  - c) Operational Restrictions
    - (1) None.
  - d) Monitoring and/or Recordkeeping Requirements
    - (1) The permittee shall collect and record the following information for each month for each emissions unit:
      - a. the company identification for each material employed in each test cell;
      - b. the amount, in gallons, of each fuel transferred into a test cell tank;
      - c. the hours of operation;
      - d. the amount of VOC emissions for each test cell determined in accordance with f)(1)b. below;
      - e. the total volatile organic compound emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells in the emissions unit), in pounds per month;
      - f. the total number of days of operation for each emissions unit during the month; and
      - g. the daily average emission rate, in lbs VOC/day, for each emissions unit determined by dividing d)(1)e. by d)(1)f.
  - e) Reporting Requirements
    - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
  - f) Testing Requirements
    - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation

VOC emissions shall not exceed 11.27 TPY.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the monthly emissions determined in f)(1)b. below for each calendar year and divide by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 61.75 lbs VOC/day as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell:

- i. Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted), and the emissions from specialty test (under vacuum and potentially heated) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)] + [\text{Specialty Test Emissions factor} * \text{hours of operation}/\text{day}]$$

Specialty Emissions Factors:

JP-4 or F-40 Fuel at 80 degrees F = 4.7 lb/hr emissions VOC

F-40 Fuel at 160 degrees F = 6.7 lb/hr emissions VOC

JP-8 Fuel at 80 degrees F = 0.06 lb/hr emissions VOC

JP-8 Fuel at 160 degrees F = 0.528 lb/hr emissions VOC

The specialty emission factors were developed from engineering estimates performed by the permittee.

One test cell within P054 is the only emissions unit that conducts the arctic/sea level test. It is the only test cell that is insulated and has a refrigeration system.

Lbs VOC/month per arctic/sea level test cell = 7.2 lbs VOC/batch x W batches/month.



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

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g) Miscellaneous Requirements

- (1) This emissions unit was installed on 1/1/1956.
- (2) Superseded permits include P0103900, issued 9/20/2012, and PTI #13-3424, issued 11/23/1998.

**9. P054, Engineering Test Cells**

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

P054 - Bldg 30, (6 test cells total); engineering testing of jet fuel pumps.

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 3745-31-05(A)(3) PTI 13-3424 issued on 7/21/1999	VOC emissions shall not exceed 6.44 TPY.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)c. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 35.29 lbs VOC/day as a monthly average.

b. These emissions units are used as a batch operation. Each test cell operates at a maximum of 3.65 batches/year.

- c. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.
  - d. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information for each month for each emissions unit:
    - a. the company identification for each material employed in each test cell;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the hours of operation;
    - d. the amount of VOC emissions for each test cell determined in accordance with f)(1)b. below;
    - e. the total volatile organic compound emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells in the emissions unit), in pounds per month;
    - f. the total number of days of operation for each emissions unit during the month; and
    - g. the daily average emission rate, in lbs VOC/day, for each emissions unit determined by dividing d)(1)e. by d)(1)f.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation

VOC emissions shall not exceed 6.44 TPY.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the monthly emissions determined in f)(1)b. below for each calendar year and divide by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 35.29 lbs VOC/day as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell:

- i. Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted), and the emissions from specialty test (under vacuum and potentially heated) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)] + [\text{Specialty Test Emissions factor} * \text{hours of operation}/\text{day}]$$

Specialty Emissions Factors:

JP-4 or F-40 Fuel at 80 degrees F = 4.7 lb/hr emissions VOC

F-40 Fuel at 160 degrees F = 6.7 lb/hr emissions VOC

JP-8 Fuel at 80 degrees F = 0.06 lb/hr emissions VOC

JP-8 Fuel at 160 degrees F = 0.528 lb/hr emissions VOC

The specialty emission factors were developed from engineering estimates performed by the permittee.

One test cell within P054 is the only emissions unit that conducts the artic/sea level test. It is the only test cell that is insulated and has a refrigeration system.

Lbs VOC/month per arctic/sea level test cell = 7.2 lbs VOC/batch x W batches/month.



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

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**Facility ID:** 1318207468

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g) Miscellaneous Requirements

- (1) This emissions unit was installed on 1/1/1956.
- (2) Superseded PTIO P0103900, issued 9/20/2012.



**10. P055 - Engineering Test Cells**

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

P055 - Bldg 31, (2 test cells total); engineering testing of jet fuel pumps (includes proposed modification to Test Cell 18).

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 3745-31-05(A)(3) PTI 13-3424 issued on 7/21/1999	VOC emissions shall not exceed 3.22 TPY.
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)c. below.

(2) Additional Terms and Conditions

a. The VOC emissions from each emissions unit shall not exceed 17.64 lbs/day as a monthly average.

b. These emissions units are used as a batch operation. Each test cell operates at a maximum of 3.65 batches/year.

- c. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.
  - d. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information for each month for each emissions unit:
    - a. the company identification for each material employed in each test cell;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the hours of operation;
    - d. the amount of VOC emissions for each test cell determined in accordance with f)(1)b. below;
    - e. the total volatile organic compound emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells in the emissions unit), in pounds per month;
    - f. the total number of days of operation for each emissions unit during the month; and
    - g. the daily average emission rate, in lbs VOC/day, for each emissions unit determined by dividing d)(1)e. by d)(1)f.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation

VOC emissions shall not exceed 3.22 TPY.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the monthly emissions determined in f)(1)b. below for each calendar year and divide by 2000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 17.64 lbs VOC/day as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell:

- i. Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted), and the emissions from specialty test (under vacuum and potentially heated) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)] + [\text{Specialty Test Emissions factor} * \text{hours of operation}/\text{day}]$$

Specialty Emissions Factors:

JP-4 or F-40 Fuel at 80 degrees F = 4.7 lb/hr emissions VOC

F-40 Fuel at 160 degrees F = 6.7 lb/hr emissions VOC

JP-8 Fuel at 80 degrees F = 0.06 lb/hr emissions VOC

JP-8 Fuel at 160 degrees F = 0.528 lb/hr emissions VOC

The specialty emission factors were developed from engineering estimates performed by the permittee.

One test cell within P054 is the only emissions unit that conducts the artic/sea level test. It is the only test cell that is insulated and has a refrigeration system.

Lbs VOC/month per arctic/sea level test cell = 7.2 lbs VOC/batch x W batches/month.



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

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g) Miscellaneous Requirements

- (1) This emissions unit was installed on 6/1/1998.
- (2) Superseded permits include P0103900, issued 9/20/2012, and PTI #13-3424, issued 11/23/1998.

**11. P056, Dry Film Preparation and Application**

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

Includes a total of seven (7) small spray booths and three (3) affiliated electric drying ovens; three of the spray booths have previously been permitted (registration status) as K003, K004 and K005. Also includes Dry Film preparation and packaging equipment.

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 3745-31-05(A)(3) PTI 13-3424 issued on 7/21/1999	VOC emissions shall not exceed 4.93 TPY from coatings VOC emissions shall not exceed 1.14 TPY from cleanup
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC rule 3745-21-09(U)(2)(e)(ii)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The VOC emissions from this emissions unit shall not exceed 27 lbs VOC/day from coatings.

- b. The permittee shall not use more than 3 gallons of coating material per day for the coating of miscellaneous metal parts.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information each day for this emissions unit:
    - a. the name and identification number of each coating employed;
    - b. the VOC content of each coating employed, in pounds per gallon, as applied;
    - c. the number of gallons of each coating employed;
    - d. the total number of gallons of all the coatings employed; and
    - e. the total VOC emissions from all the coatings employed, in pounds, i.e., the sum of d)(1)b. times d)(1)c. for each coating employed.
  - (2) The permittee shall collect and record the following information for each month for this emissions unit:
    - a. the company identification of each cleanup material employed;
    - b. the number of gallons of each cleanup material employed;
    - c. the VOC content of each cleanup material employed, in pounds per gallon;
    - d. the total VOC emissions from all cleanup materials employed, in pounds, i.e., the sum of d)(2)b. times d)(2)c. for each cleanup employed;
    - e. if cleanup materials are collected for off-site disposal and/or recovery, the following records shall be maintained if a credit is to be applied to the monthly VOC emissions:
      - i. the amount of cleanup material recovered during the month\* for off-site disposal and/or recovery, in gallons (or pounds, if records of recovered cleanup material is maintained by weight and VOC content in percent by weight);
      - ii. the VOC content of the recovered cleanup material shall be based on the lowest VOC content of any cleanup material collected, in pounds per gallon (or percent by weight); or it may be based upon a laboratory analyses provided by the facility to which the waste solvent is shipped;



iii. the date the recovered cleanup material was shipped, the amount shipped (minus the container), and the name and address of the receiving, disposal, and/or recovery facility; and

f. the total monthly VOC emission from cleanup operations, in pounds, i.e., [d)(2)d.] – [d)(2)e.i. x d)(2)e.ii.].

\* A daily log may be required for recovered waste cleanup solvents, where a record of the monthly total volume or weight of the collected material cannot be accurately maintained. This amount shall be adjusted if the volume or weight shipped is less than the sum of the monthly recovered solvent added to the container.

(3) The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in d)(1)e. plus the sum of the monthly emissions from cleanup materials for the calendar year in d)(2)d. or d)(2)f.

e) Reporting Requirements

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

f) Testing Requirements

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

a. Emission Limitation

VOC emissions shall not exceed 4.93 TPY VOC from coatings.

Applicable Compliance Method

Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the daily emissions from coatings for each calendar year and divide by 2,000 lbs/ton.

b. Emission Limitation

VOC emissions shall not exceed 27 lbs VOC/day from coatings.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and d)(2).



**Draft Permit-to-Install and Operate**

Eaton Industrial Corporation

**Permit Number:** P0120410

**Facility ID:** 1318207468

**Effective Date:** To be entered upon final issuance

c. Emission Limitation

VOC emissions shall not exceed 1.14 TPY from cleanup.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(2).

d. Emission Limitation

Permittee shall not exceed more than 3 gals/day coating use.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1).

g) Miscellaneous Requirements

(1) This emissions unit was installed on 11/1/1978.

(2) Superseded permits include P0103900, issued 9/20/2012, and PTI #13-3424, issued 11/23/1998.

**12. P059, Reference Test Cells**

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

Bldg 7, Rooms 1 and 2 – Reference test cells

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 3745-31-05(A)(3)	VOC emissions shall not exceed 1.45 TPY
b.	OAC 3745-31-05(F)	See b)(2)a. below.
c.	OAC 3745-21-07(M)	See b)(2)b. below.

(2) Additional Terms and Conditions

a. The VOC emissions from this emissions unit shall not exceed 7.95 lbs VOC/day as a monthly average.

b. The requirements of the OAC rule 3745-21-07(M) do not apply because there is no control device for this emissions unit.

c. Operation of these emissions units is defined as when fuel is present in the day tanks, transfer of fuel is occurring, or when a jet aircraft pump is on the stand and is recirculating fuel for testing.

- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each month for this emissions unit:
    - a. the company identification for each material employed;
    - b. the amount, in gallons, of each fuel transferred into a test cell tank;
    - c. the number of days of operation;
    - d. the volatile organic compound emission rate for all materials, in pounds per month, determined in accordance with f)(1)b. below for each test cell;
    - e. the total VOC emission rate for all test cells contained in the emissions unit (summation of d)(1)d. for all test cells), in pounds per month; and
    - f. the average daily volatile organic compound emission rate for all materials, in pounds per day, determined by dividing d(1)e. by d)(1)c.
- e) Reporting Requirements
  - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Cleveland Division of Air Quality by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
  - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation  
  
VOC emissions shall not exceed 1.45 TPY VOC.  
  
Applicable Compliance Method  
  
Compliance shall be determined based on the recordkeeping as specified in d)(1) by summing the monthly emissions for each calendar year and dividing by 2,000 lbs/ton.



b. Emission Limitation

VOC emissions shall not exceed 7.95 lbs VOC/day as a monthly average.

Applicable Compliance Method

Compliance shall be determined from the record keeping as specified in d)(1) and using the following calculation for each test cell.

Emissions shall be determined by summing the filling loss emissions (using the emission factor from AP-42 Table 5.2-5), the standing loss emissions (using the emission equation from AP-42 equation 1-2), and the spill loss emissions (estimated 5% loss to floor and 20% of that amount is emitted) as follows:

$$\text{lbs VOC/month (fuel throughput)} = (\text{actual tank size gals}/250 \text{ gals}) * [((1.5 \text{ lbs VOC}/1000 \text{ gal}) * \text{gal/month}) + (0.233 \text{ lb VOC}/\text{day} * \text{days of operation per month}) + (\text{gal/month} * 6.6 \text{ lbs VOC}/\text{gal} * 0.05 * 0.20)]$$

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 1/1/1955.
- (2) Superseded PTIO P0103900, issued 9/20/2012.