



Environmental Protection Agency

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

5/10/2011

Ron Rice  
Parker Hannifin, HPD  
14249 Industrial Parkway  
Marysville, OH 43040

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0180010110  
Permit Number: P0107585  
Permit Type: Renewal  
County: Union

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 EPA Weekly Review and the local newspaper, Marysville Tribune. 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 "Issued Air Pollution Control Permits" link. 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  
Permit Review/Development Section  
Ohio EPA, DAPC  
122 South Front Street  
Columbus, Ohio 43215

and Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 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 in writing 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 Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification  
Ohio EPA-CDO

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Parker Hannifin, HPD (Parker Hannifin), located in the city of Marysville in Union County, manufactures and coats hydraulic pumps. Parker Hannifin received a final Title V for the facility on February 29, 2000. A renewal application was submitted on September 20, 2004. In 2004, Parker Hannifin transitioned from using trichloroethylene (a hazardous air pollutant) to n-propyl bromide (a non-hazardous air pollutant). Due to a reduction in facility emissions, Parker Hannifin submitted a synthetic minor permit application to avoid Title V on February 7, 2011. This Federally-Enforceable Permit to Install and Operate (FEPTIO) includes the following emissions units:

B009- Diesel Test Stand No. 2

R001- Paint Spray Booth

L004- Vapor Degreaser

L005- Vapor Degreaser

3. Facility Emissions and Attainment Status:

Union County is in full attainment for all criteria pollutants. Facility-wide potential emissions for criteria pollutants are under 100 tons per year and total hazardous air pollutants (HAP) are under 25 tons per year. Prior to issuance of this FEPTIO, facility-wide potential emissions for individual HAP (xylene) emissions were 12 tons per year. However, actual facility emissions are far below this potential. (The highest reported level of annual organic compound emissions over the past 10 years at Parker Hannifin was 4.58 tons in 2009.) The synthetic minor strategy limits the annual coating usage for the emissions unit R001 to 9,000 gallons. The appropriate operational, recordkeeping, reporting and testing requirements have been established to ensure compliance with the HAP restriction.

4. Source Emissions:

### B009 Emissions

Calculated in accordance with AP-42 Chapter 3, Section 3.3 Gasoline and Diesel Industrial Engines

CO:

$0.95 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 3.33 \text{ lb/hr}$

$3.33 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 29,171 \text{ lb/yr} = 14.6 \text{ ton/yr}$

NOx:

$4.41 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 15.44 \text{ lb/hr}$

$15.44 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 135,254 \text{ lb/yr} = 67.6 \text{ ton/yr}$

PE:

$0.31 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 1.09 \text{ lb/hr}$



$$1.09 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 9,548 \text{ lb/yr} = 4.8 \text{ ton/yr}$$

SO<sub>2</sub>:

$$0.29 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 1.02 \text{ lb/hr}$$

$$1.02 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 8,935 \text{ lb/yr} = 4.5 \text{ ton/yr}$$

VOCs:

$$0.35 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 1.23 \text{ lb/hr}$$

$$1.23 \text{ lb/hr} \times 8760 \text{ hr/yr} = 10,775 \text{ lb/yr} = 5.4 \text{ ton/yr}$$

### R001 Emissions

Calculated in accordance with Engineering Guide #45 Calculation of "Potential to Emit" for Surface Coating Lines. Emissions calculated using the paints with the highest VOC, HAP and solids contents.

$$\text{Maximum Flow through Spray Gun (gal/hr)} = 5$$

The painting operation takes approximately 5 minutes and requires 15 minutes minimum drying time per application. Therefore, the actual painting operation can operate only 15 minutes per hour (0.25 hours).

VOCs:

$$\text{Opex L61 Paint VOC Content (lb/gal)} = 4.99$$

$$\text{Thinner/Reducer VOC Content (lb/gal)} = 7.24$$

$$\text{Maximum Reducer per Gallon Paint (gal)} = 0.5$$

Maximum VOC Content Applied =

$$[(2 \text{ gal} \times 4.99 \text{ lb VOC/gal}) + (1 \text{ gal} \times 7.24 \text{ lb VOC/gal})] / (2 \text{ gal} + 1 \text{ gal}) = 5.74 \text{ lb VOC/gal}$$

$$\text{VOC PTE} = (5.74 \text{ lb VOC/gal}) (5 \text{ gal/hr}) (0.25 \text{ hr}) = 7.175 \text{ lb/hr}$$

$$\text{VOC PTE} = (7.175 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) = 62,853 \text{ lb/yr} = 31.43 \text{ ton/yr}$$

PE:

Assuming a transfer efficiency of 60%

$$\text{Fast Dry 2500 Paint weight (lb/gal)} = 8.6$$

$$\text{Fast Dry 2500 Solids weight (59\% w/w) (lb/gal)} = 5.1$$

$$\text{Solids transfer/gallon paint (60\% of weight) (lb/gal)} = 3.0$$

$$\text{PE rate (5.1 lb/gal - 3.0 lb/gal) (lb/gal)} = 2.1$$

$$\text{PE PTE} = 2.1 \text{ lb/gal} \times 5 \text{ gal/hr} \times 0.25 \text{ hr} = 2.625 \text{ lb/hr}$$

$$\text{PE PTE} = 2.625 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 22,995 \text{ lb/yr} = 11.5 \text{ ton/yr without controls}$$

R001 employs a fiberglass air particulate filter with a capture efficiency of 90 % and a control efficiency of 98%.

$$\text{Overall efficiency} = (.90 \times .98) = 88.20\%$$

$$\text{Therefore, PTE with controls} = (100\% - 88.20\%) / 100\% \times (2.625 \text{ lb/hr}) = 0.31 \text{ lb/hr} = 1.36 \text{ ton/yr}$$

Total HAPs:

$$\text{Opex L61 Paint VOC Content (lb/gal)} = 4.99 \quad (5\% \text{ toluene, } 0.7\% \text{ ethylbenzene, and } 4\% \text{ xylenes)}$$

$$\text{Opex L61 Paint HAPs Content (lb/gal)} = 0.5$$

$$\text{Thinner/Reducer VOC Content (lb/gal)} = 7.24 \quad (75\text{-}85\% \text{ xylenes, } 15\text{-}25\% \text{ ethylbenzene)}$$

$$\text{Maximum Reducer per Gallon Paint (gal)} = 0.5$$

Maximum HAPs Content Applied =

$$[(2 \text{ gal} \times 0.499 \text{ lb HAP/gal}) + (1 \text{ gal} \times 7.24 \text{ lb HAP/gal})] / (2 \text{ gal} + 1 \text{ gal}) = 2.75 \text{ lb HAPs/gal}$$



$$\text{HAPs PTE} = (2.746 \text{ lb HAPs/gal}) \times (5 \text{ gal/hr}) \times (0.25 \text{ hr}) = 3.4325 \text{ lb/hr}$$
$$\text{HAPs PTE} = (3.4325 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) = 30068.7 \text{ lb/yr} = 15.0 \text{ ton/yr}$$

Individual HAP (Xylene):

$$\text{Maximum Xylene Content Applied} = \frac{[(2 \text{ gal} \times 0.1996 \text{ lb xylene/gal}) + (1 \text{ gal} \times 6.154 \text{ lb xylene/gal})]}{(2 \text{ gal} + 1 \text{ gal})} = 2.1844 \text{ lb xylene/gal}$$

$$\text{Xy HAP PTE} = (2.1844 \text{ lb xylene/gal}) \times (5 \text{ gal/hr}) \times (0.25 \text{ hr}) = 2.7305 \text{ lb/hr}$$

$$\text{Xy HAP PTE} = (2.7305 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) = 2,3919.18 \text{ lb/yr} = 11.95959 \text{ ton/yr}$$

The synthetic minor strategy for this unit includes limiting the usage of paint to 9,000 gallons per year, as applied.

$$(9,000 \text{ gal}) \times (2.1844 \text{ lb xylene/gal}) / (2,000 \text{ lb/ton}) = 9.83 \text{ ton/yr Individual HAP}$$

$$(9,000 \text{ gal}) \times (2.746 \text{ lb HAPs/gal}) / (2,000 \text{ lb/ton}) = 12.4 \text{ ton/yr Total HAPs}$$

$$(9,000 \text{ gal}) \times (5.74 \text{ lb VOCs/gal}) / (2,000 \text{ lb/ton}) = 25.8 \text{ ton/yr VOCs}$$

$$(9,000 \text{ gal}) \times (2.1 \text{ lb PE/ gal}) / (2,000 \text{ lb/ton}) \times (100\% - 88.20\%) / 100\% = 1.12 \text{ ton/yr PE}$$

#### L004 and L005 Emissions

Calculated in accordance with AP-42 Chapter 4, Section 4.6 Solvent Degreasing

VOCs:

$$\text{Emissions Factor} = 0.15 \text{ lb/hr/ft}^2$$

$$\text{Area of L004 and L005} = (5.5 \text{ ft}) \times (3.5 \text{ ft}) = 19.25 \text{ ft}^2$$

$$\text{Uncontrolled emissions rate} = 0.15 \text{ lb/hr/ft}^2 \times 19.25 \text{ ft}^2 = 2.89 \text{ lb/hr}$$

$$2.89 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 2,5316.4 \text{ lb/yr} = 12.6 \text{ ton/yr}$$

The vapor degreasers are equipped with refrigerated condenser coils.

Applying a 75% reduction in emissions (in accordance with AP-42):

$$2.89 \text{ lb/hr} \times 25\% = 0.72 \text{ lb/hr}$$

$$12.6 \text{ ton/yr} \times 25\% = 3.2 \text{ ton/yr}$$

#### 5. Conclusion:

The issuance of P0107585 is recommended. The emission limitations contained in this FEPTIO are adequate to provide federally enforceable limitations to ensure that the applicable HAP threshold will not be exceeded.

#### 6. Please provide additional notes or comments as necessary:

When their final Title V permit was issued in 2000, Parker Hannifin's vapor degreasers were subject to 40 CFR Part 63 Subpart T- National Emission Standards for Halogenated Solvent Cleaning. In 2004, Parker Hannifin transitioned from using trichloroethylene (a hazardous air pollutant) to n-propyl bromide (a non-hazardous air pollutant). In accordance with the determination found on page 4 of 6 of Engineering Guide #67, Parker Hannifin is no longer subject to the MACT standard.

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	14.6
NOx	67.6
PE	5.9
SO <sub>2</sub>	4.5
OC/VOC	37.6
Individual HAP	9.9
Total HAPs	12.4

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
Parker Hannifin, HPD

Issue Date: 5/10/2011

Permit Number: P0107585

Permit Type: Renewal

Permit Description: Renewal FEPTIO transitioning from Title V to synthetic minor. The permit includes a diesel engine (B009), paint booth (R001) and two vapor degreasers (L004 and L005).

Facility ID: 0180010110

Facility Location: Parker Hannifin, HPD  
14249 Industrial Parkway,  
Marysville, OH 43040

Facility Description: All Other Miscellaneous General Purpose Machinery Manufacturing

Scott J. Nally, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Pamela McCoy at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049 or (614)728-3778. The permit can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)



**Ohio**

**Environmental  
Protection Agency**

**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Parker Hannifin, HPD**

Facility ID:	0180010110
Permit Number:	P0107585
Permit Type:	Renewal
Issued:	5/10/2011
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
Parker Hannifin, HPD

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## Authorization

Facility ID: 0180010110

Application Number(s): A0040310, A0041484

Permit Number: P0107585

Permit Description: Renewal FEPTIO transitioning from Title V to synthetic minor. The permit includes a diesel engine (B009), paint booth (R001) and two vapor degreasers (L004 and L005).

Permit Type: Renewal

Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 5/10/2011

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:

Parker Hannifin, HPD  
14249 Industrial Parkway  
Marysville, OH 43040

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0107585

Permit Description: Renewal FEPTIO transitioning from Title V to synthetic minor. The permit includes a diesel engine (B009), paint booth (R001) and two vapor degreasers (L004 and L005).

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>B009</b>
Company Equipment ID:	Diesel Test Stand No. 2
Superseded Permit Number:	01-08798
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>R001</b>
Company Equipment ID:	Paint Spray Booth
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

**Group Name: Vapor Degreasers**

<b>Emissions Unit ID:</b>	<b>L004</b>
Company Equipment ID:	Vapor Degreaser
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>L005</b>
Company Equipment ID:	Vapor Degreaser
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office 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<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

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<sup>1</sup>Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

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

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

Parker Hannifin, HPD

**Permit Number:** P0107585

**Facility ID:** 0180010110

**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.
    - (1) None.

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

**1. B009, Diesel Test Stand No. 2**

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

Diesel engine - 3.5 mmBTU/hr

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 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) from the engine's exhaust shall not exceed 0.310 lb/MMBtu of actual heat input.
c.	OAC rule 3745-18-06(B)	See b)(2)a. below.
d.	OAC rule 3745-31-05(A)(3) (PTI 01-08798)	Carbon monoxide (CO) emissions shall not exceed 3.33 lb/hr and 14.6 ton/yr.  Nitrogen oxide (NOx) emissions shall not exceed 15.44 lb/hr and 67.6 ton/yr.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 1.02 lb/hr and 4.5 ton/yr.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions shall not exceed 1.23 lb/hr and 5.4 ton/yr. The requirements for this rule also include compliance with the requirements of OAC rules 3745-17-07 (A)(1).  See b)(2)b., d)(1) and d)(2) below.

(2) Additional Terms and Conditions

- a. Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten MM Btu per hour total rated capacity are exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06 and from OAC rules 3745-18-07 to 3745-18-94.
- b. The permittee shall be required to burn only No. 2 diesel fuel containing less than 0.5% sulfur by weight in this emissions unit.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) For each shipment of fuel oil received, the permittee shall maintain records of the permittee's or suppliers' analysis for sulfur content.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

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

[OAC rule 3745-17-03(B)(1)(a)]

b. Emission Limitation:

CO emissions shall not exceed 3.33 lb/hr and 14.6 ton/yr.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the emission factor, 0.95 lb/MMBtu of actual heat input (AP-42, Table 3.3-1, 10/1996), by the maximum heat input, 3.5 MMBtu/hr. The annual limitation is the hourly limitation multiplied by 8,760 hours/year.

$$\text{CO: } 0.95 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 3.33 \text{ lb/hr}$$

$$3.33 \text{ lb/hr} \times 8,760 \text{ hrs/yr} / 2,000 \text{ lb/ton} = 14.6 \text{ ton/yr}$$

If required, the permittee may demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10 for CO. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

c. Emission Limitation:

NOx emissions shall not exceed 15.44 lb/hr and 67.6 ton/yr.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the emission factor, 4.41 lb/MMBtu of actual heat input (AP-42, Table 3.3-1, 10/1996), by the maximum heat input, 3.5 MMBtu/hr. The annual limitation is the hourly limitation multiplied by 8,760 hours/year.

$$\text{NOx: } 4.41 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 15.44 \text{ lb/hr}$$

$$15.44 \text{ lb/hr} \times 8,760 \text{ hrs/yr} / 2,000 \text{ lb/ton} = 67.6 \text{ ton/yr}$$

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60,

Appendix A, Methods 1-4 and 7E for NO<sub>x</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:

PE shall not exceed 0.310 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance with the limitation may be demonstrated by the emission factor, 0.31 lb/MMBtu of actual heat input (AP-42, Table 3.3-1, 10/1996).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 for particulate. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 1.02 lb/hr and 4.5 ton/yr.

Applicable Compliance Method:

Compliance with the hourly limitation may be demonstrated by multiplying the emission factor, 0.29 lb/MMBtu of actual heat input (AP-42, Table 3.3-1, 10/1996), by the maximum heat input, 3.5 MMBtu/hr. The annual limitation is the hourly limitation multiplied by 8,760 hours/year.

$$\text{SO}_2: 0.29 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 1.02 \text{ lb/hr}$$

$$1.02 \text{ lb/hr} \times 8,760 \text{ hours/year} / 2,000 \text{ lb/ton} = 4.5 \text{ ton/yr}$$

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and Method 6C for SO<sub>2</sub>. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

VOC emissions shall not exceed 1.23 lb/hr and 5.4 ton/yr.

Applicable Compliance Method:

Compliance with the hourly limitation may be demonstrated by multiplying the emission factor, 0.35 lb/MMBtu of actual heat input (AP-42, Table 3.3-1, 10/1996), by the maximum heat input, 3.5 MMBtu/hr. The annual limitation is the hourly limitation multiplied by 8,760 hours/year.

$$\text{VOC: } 0.35 \text{ lb/MMBtu} \times 3.5 \text{ MMBtu/hr} = 1.23 \text{ lb/hr}$$

$$1.23 \text{ lb/hr} \times 8,760 \text{ hours/year} / 2,000 \text{ lb/ton} = 5.4 \text{ ton/yr}$$

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If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25, or 25A for VOC. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

g) Miscellaneous Requirements

- (1) None.

**2. R001, Paint Spray Booth**

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

Paint Spray Booth

- 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. b)(1)c., c)(3), d)(7) and e)(2)
- 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 3745-17-11(C)	See c)(1), c)(2) and d)(1) through d)(5) below.
b.	OAC rule 3745-21-09(U)(2)(e)(iii)	See b)(2)a., d)(6) and e)(1) below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V)	The hazardous air pollutants (HAP) emissions from R001 shall not exceed 9.9 tons per year from any individual HAP from coatings, thinners and clean-up materials.  See c)(3), d)(7) and e)(2) below.

- (2) Additional Terms and Conditions
  - a. The permittee shall not use more than 10 gallons of coating material per day for the coating of miscellaneous metal parts.

c) Operational Restrictions

- (1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever the emissions unit is in operation and shall maintain the dry particulate filters in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[OAC rule 3745-17-11(C)(1) and (2)(b)]

- (2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[OAC rule 3745-17-11(C)(2)(e)]

- (3) The maximum annual coating usage for the emissions unit R001 shall not exceed 9,000 gallons as applied, based upon a rolling, 12-month summation of the coating usage figures. The emissions unit, R001, has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to Ohio EPA, Central District Office upon request.

[OAC 3745-17-11(C)(2)(a)]

- (2) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[OAC rule 3745-17-11(C)(2)(c)]

- (3) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[OAC rule 3745-17-11(C)(2)(c)]

- (4) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to Ohio EPA, Central District Office upon request.

[OAC rule 3745-17-11(C)(2)(d) and (f)]

- (5) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

[OAC rule 3745-17-11(C)(2)(e),(f), and (g)], for [OAC rule 3745-17-11(C)(1)]

- (6) The permittee shall collect and record the following information each day when coating metal products:

- a. The name and identification number of each coating employed.
- b. The number of gallons of each coating employed.
- c. The total number of gallons of all the coatings employed.

- (7) The permittee shall collect and record the following information each month for R001:

- a. The name and identification number of each coating, thinner, and clean-up material employed.
- b. The total volume, in gallons, of each coating, thinner, and clean-up material employed.
- c. The individual HAP content of each coating, thinner, and clean-up material in pounds per gallon.
- d. The individual HAP emissions from all coatings, thinners, and clean-up materials employed, in pounds or tons.
- e. The rolling, 12-month summation of the individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

e) Reporting Requirements

- (1) The permittee shall notify the director (Ohio EPA, Central District Office) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limit of 10 gallons per day. The notification shall include a copy of such record and shall be sent to the director (Ohio EPA, Central District Office) within 30 days after the exceedance occurs.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. HAP emissions limitations outlined in b)(1)c.
    - ii. coating usage limitations outlined in c)(3)
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the director (Ohio EPA, Central District Office).

[OAC rule 3745-15-03(B)(1)(b)] and [OAC rule 3745-15-03(C)]

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

- (1) Compliance with the emissions limitations in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

Coating usage shall not exceed 10 gallons per day for the coating of miscellaneous metal parts.

Applicable Compliance Method:

The record keeping requirements in d)(6) shall be used to determine compliance with the above limitation.

b. Emission Limitation:

The HAP emissions shall not exceed 9.9 tons per year from any individual HAP from coatings, thinners and clean-up materials.

Applicable Compliance Method:

The record keeping requirements in d)(7) shall be used to determine compliance with the above limitation.

- (2) U.S. EPA Method 24 or formulation data shall be used to determine the OC contents of coatings, thinners and clean-up materials.

g) Miscellaneous Requirements

- (1) None.

**3. Emissions Unit Group -Vapor Degreasers: L004, L005,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
L004	Vapor Degreaser
L005	Vapor Degreaser

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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-21-09(O)	See b)(2)a., b)(2)b., c)(1), d)(1), d)(2), and e)(1) below.
b.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 3.2 tons per year.

(2) Additional Terms and Conditions

a. The open top vapor degreaser shall be equipped with and shall employ a cover and safety switches as described below:

i. The cover shall be installed so that it can be opened and closed easily without disturbing the vapor zone.

ii. A condenser flow switch and thermostat (or other such device) shall shut off the sump heat if the condenser coolant is either not circulating or too warm.

- iii. If using a spray application, a spray safety switch shall shut off the spray pump if the vapor level drops below any fixed spray nozzle.
- iv. A vapor level control thermostat (or other such device) shall shut off the sump heat when the vapor level rises too high.
- v. A water flow switch or water pressure switch (or other such device) shall shut off the sump heat if the water in a water-cooled condenser has no flow or no pressure, whichever is being monitored.

[OAC rule 3745-21-09(O)(3)(a) and (b)]

- b. The refrigerated chiller shall be operated to control the temperature of the solvent used in the open top vapor degreaser during cleaning operations.

[OAC rule 3745-21-09(O)(3)(c)(ii)]

c) **Operational Restrictions**

- (1) The open top vapor degreaser shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
  - a. The cover shall be kept closed at all times except when processing work loads through the degreaser.
  - b. Solvent carry-out shall be minimized by:
    - i. racking parts so that solvent drains freely and is not trapped;
    - ii. moving parts in and out of the degreaser at less than 11 feet per minute;
    - iii. holding the parts in the vapor zone at least 30 seconds or until condensation ceases, whichever is longer;
    - iv. tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and
    - v. allowing parts to dry within the degreaser for at least 15 seconds or until visually dry, whichever is longer.
  - c. Porous and/or absorbent materials shall not be cleaned.
  - d. Workloads shall occupy no more than one-half of the degreaser's open-top area.
  - e. Solvent spraying shall only be conducted within the vapor level.
  - f. Solvent leaks shall be repaired immediately, or the degreaser shall be shut down.
  - g. Solvent waste shall only be stored in covered containers.

- h. The degreaser shall be operated so that water cannot be visually detected in solvent exiting the water separator.
- i. No ventilation fans shall be used near the degreaser opening.
- j. When the cover is open, the open top vapor degreaser shall not be exposed to drafts greater than 131 feet per minute, as measured between 3 and 6 feet upwind and at the same elevation as the tank lip.
- k. If a lip exhaust is used on the open top vapor degreaser, the ventilation rate shall not exceed 65 cubic feet per minute per square foot of degreaser open area, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements.
- l. A permanent, conspicuous label, summarizing the operating procedures shall be posted on or near to the degreaser.

[OAC rule 3745-21-09(O)(3)(d)]

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

(1) The permittee shall maintain records of the following information:

- a. the types of solvents employed in the open top vapor degreaser, including the chemical name(s) and concentration(s);
- b. all maintenance conducted on the refrigerated chiller, including the date and activity; and

These records shall be maintained for at least 5 years and shall be made available to the director or his representative upon verbal or written request.

[OAC rule 3745-21-09(O)(5)-in part]

(2) The permittee shall maintain records of the following information, collected at the end of each year:

- a. the total cleaning solvent added to the open top vapor degreaser or the amount purchased for use in the emissions unit during the year;
- b. the total amount of solvent collected for disposal and/or recovery and shipped off-site during the year; and
- c. the estimated annual VOC emissions from this emissions unit, calculated using the difference between the solvent used or purchased and the used solvent shipped offsite, adjusting the units to calculate the emissions in tons/year.

e) **Reporting Requirements**

(1) The permittee shall submit quarterly deviation reports documenting any period of time during which the refrigerated chiller was not in operation during cleaning operations,

and/or any period of time during which the open top vapor degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

[OAC rule 3745-21-09(O)(3)(c)(ii)]

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

- (1) Compliance with the emission limitation in b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation:

3.2 tons/year VOC emissions

Applicable Compliance Method:

To determine the actual VOC emission rate, the following equation shall be used:

$E = (L_s - L_w) \times D / 2000$ , where:

E = VOC emissions rate (tons/year)

L<sub>s</sub> = liquid volume of cleaning solvent employed each year (gallons)

L<sub>w</sub> = liquid volume of cleaning solvent sent off site as waste (gallons)

D = density of cleaning solvent (pounds/gallon)

If more than one type of cleaning solvent is employed, the above equation shall be used for each cleaning solvent. The total annual VOC emission rate shall be determined by the summation of the annual VOC emission rates for all cleaning solvents.

g) Miscellaneous Requirements

- (1) None.