



State of Ohio Environmental Protection Agency

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6/1/2009

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Mr. Dayu Zhang  
Sunoco., Midwest Terminal  
PO Box 1014  
Toledo, OH 43697

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0125040580  
Permit Number: 01-01325  
Permit Type: Initial Installation  
County: Franklin

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate 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 comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Columbus Dispatch. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. 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 and operate 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 and Operate 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, Manager  
Permit Issuance and Data Management Section, DAPC

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

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director



PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
Sunoco., Midwest Terminal

Issue Date: 6/1/2009  
Permit Number: 01-01325  
Permit Type: Initial Installation  
Permit Description: Truck loading rack.  
Facility ID: 0125040580  
Facility Location: Sunoco., Midwest Terminal  
3866 Fisher Rd,  
Columbus, OH 43228  
Facility Description: Petroleum Bulk Stations and Terminals

Chris Korleski, 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 Olen Ackman at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049 or (614)728-3778. The permit can be downloaded from the Web page: [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc)





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Sunoco Partners Marketing & Terminals Columbus West Terminal (Facility ID No. 01-25-04-0580) is an existing petroleum products distribution terminal in Columbus. The facility consists of a two bay loading rack (J001) previously controlled with a carbon adsorption/absorption vapor recovery unit (VRU), and seven (7) storage tanks (non-trivial sources). In order to avoid Title V thresholds, the facility's current Federally Enforceable State Operating Permit (FESOP) limits the throughput of gasoline/ethanol and distillates fuels to 195,000,000 gallons per year and 31,600,000 gallons per year, respectively.

Since issuance of the FESOP in 2004 the facility has upgraded J001's control equipment to a John Zink vapor combustion unit and has added floating roofs to two of the storage tanks. Subsequently, Sunoco Partners Marketing & Terminals has submitted a FEPTIO application requesting that the facility throughput limits be increased to 335,000,000 gallons per year of gasoline/ethanol and 50,000,000 gallons per year of distillates.

3. Facility Emissions and Attainment Status:

The facility receives gasoline and distillates by pipeline and denatured ethanol by railroad tank car. The fuels are stored in storage tanks and loaded into tank trailers via the loading rack located at the facility. The uncontrolled facility-wide PTE VOC emissions exceed 100 tons per year. VOC vapors from the gasoline/ethanol and distillates loading operations are directed to the vapor combustion unit. The facility currently has federally enforceable restrictions which limit the PTE to less than 86.3 tons VOC per year. These emissions include 65.63 tons PTE VOC emissions per year from the loading rack, 0.97 tons PTE VOC emissions per year from loading rack fugitive sources, and 19.74 tons PTE VOC emissions per year from the storage tanks. With the increased throughput restrictions the facility PTE will increase to 99.79 tons per year. 67.3 tons VOC per year will be attributed to the loading rack, 1.1 tons VOC per year will be attributed to non-loading rack fugitive sources, and 31.33 tons VOC per year will be attributed to the storage tanks. Total and individual annual hazardous air pollutant (HAP) emissions from this facility do not exceed the 25 tons per year and 10 tons per year major source thresholds, respectively. See the following table for a breakdown of facility emissions.



Table 1.1 - Proposed Facility Wide Potential to Emit

Emission Unit	Ohio EPA ID	Primary Storage	VOC (TPY)	Benzene (TPY)	Ethyl benzene (TPY)	Hexane (TPY)	Toluene (TPY)	Xylene (TPY)	2,2,4-Trimethylpentane (TPY)	1,2,4-Trimethylbenzene (TPY)	Total HAPs (TPY)**
Gasoline Truck Loading†	J001		66.95	0.6025	0.0669	1.0712	0.8703	0.3347	0.5356	0	3.48
Distillate Truck Loading††	J001		0.40	0.0009	0.0012	0.0002	0.0096	0.0229	0	0.0171	0.020
Fugitives†††	Z003		1.12	0.0101	0.0011	0.0179	0.0145	0.0056	0.0089	0	0.058
Storage Tank #011*	T005	transmix	3.72	0.0335	0.0037	0.0596	0.0484	0.0186	0.0298	0	0.194
Storage Tank #201*	T001	gasoline	2.92	0.0263	0.0029	0.0467	0.0379	0.0146	0.0233	0	0.152
Storage Tank #202*	T006	ethanol	19.27	0.0067	0.0007	0.0119	0.0096	0.0037	0.0059	0	0.038
Storage Tank #301*	T002	diesel	0.41	0.0009	0.0013	0.0002	0.0099	0.0237	0	0.0177	0.022
Storage Tank #302*	T003	gasoline	1.86	0.0168	0.0019	0.0298	0.0242	0.0093	0.0149	0	0.097
Storage Tank #501*	T007	gasoline	2.70	0.0243	0.0027	0.0432	0.0351	0.0135	0.0216	0	0.140
Additive Tank*	Z001	additive	0.23	0.0021	0.0002	0.0037	0.003	0.0012	0.0018	0	0.012
Oil/Water Separator**	Z002		0.20	0.0018	0.0002	0.0033	0.0027	0.001	0.0016	0	0.011
<b>Totals</b>			<b>99.80</b>	<b>0.73</b>	<b>0.08</b>	<b>1.29</b>	<b>1.07</b>	<b>0.45</b>	<b>0.64</b>	<b>0.03</b>	<b>4.29</b>

†VOC emissions determined by multiplying the annual throughput restriction by the VCU emission factor of 0.0029 lb/gal (from manufacturer specs and verified by stack test May '06) and the loading rack fugitive emission factor of 0.0001 lb/gal (from AP-42).

††VOC emissions determined by multiplying the annual throughput restriction by the VCU emission factor of 0.000016 lb/gal (from AP-42).

†††Fugitive emissions provided by the facility utilizing U.S. EPA factors DPA-453/R-95-017 1995 Protocol for Equipment Leak Emission Estimates.

\*Data from Tanks 4.0

\*\*Data supplied by the facility in the PTI application.

\*\*\*For a details on the HAP emissions calculations see Section E.5 of the proposed permit.

#### 4. Source Emissions:

VOC emissions from the gasoline/ethanol and distillates loading operations at the loading rack (J001) are controlled at the VCU. Controlled and fugitive VOC emissions from the loading rack (J001) are estimated to be 67.3 (a stack test performed in May of 2006 measured actual VCU emissions at < 40 tons per year). This emission limit is based upon a gasoline/ethanol throughput of 335,000,000 gallons per year and a distillates throughput of 50,000,000 gallons per year. HAP emissions from the loading rack are estimated to be 3.5 tons per year

#### Calculations J001:

VCU Exhaust VOC Worst Case Emission Factor = 0.0002914 lbs/gal gasoline/ethanol loaded

VCU Exhaust VOC Worst Case Emission Factor = 0.000016 lbs/gal distillates loaded

Loading Rack VOC Fugitive Emission Factor = 0.000108 lbs/gal gasoline loaded

Gasoline/Ethanol Loaded = 335,000,000 gal/yr

Distillates Loaded = 50,000,000 gal/yr



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 Division of Air Pollution Control

**Permit Strategy Write-Up**  
**Permit Number:** 01-01325  
**Facility ID:** 0125040580

$$\text{VOC Emissions} = [(0.0002914 \text{ lbs VOC/gal} * 335,000,000 \text{ gal/yr}) + (0.000016 \text{ lbs VOC/gal} * 50,000,000 \text{ gal/yr}) + (0.000108 \text{ lbs VOC/gal} * 335,000,000 \text{ gal/yr})] * (1\text{ton} / 2000\text{lbs}) = 67.3 \text{ tons VOC/yr.}$$

5. Conclusion:

The FEPTIO includes federally enforceable limits and terms and conditions which restrict Sunoco Partners Marketing & Terminals Columbus West Terminal PTE VOC and HAP emissions below those levels which trigger Title V permitting requirements. Facility wide VOC emissions for non-insignificant sources are conservatively estimated to be 99.8 tons per year. Gasoline/ethanol and distillates loading at the facility shall be restricted to 335,000,000 and 50,000,000 gallons per year, respectively. The facility will maintain and operate a vapor combustion unit to control VOC emissions from the loading rack.

6. Please provide additional notes or comments as necessary:

None

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	67.3





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**DRAFT**

**Air Pollution Permit-to-Install and Operate  
for  
Sunoco., Midwest Terminal**

Facility ID: 0125040580  
Permit Number: 01-01325  
Permit Type: Initial Installation  
Issued: 6/1/2009  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





**Air Pollution Permit-to-Install and Operate**  
for  
Sunoco., Midwest Terminal

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

**Permit Number:** 01-01325

**Facility ID:** 0125040580

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

## Authorization

Facility ID: 0125040580  
Application Number(s): A0000615, A0037059  
Permit Number: 01-01325  
Permit Description: Truck loading rack.  
Permit Type: Initial Installation  
Permit Fee: \$100.00 *DO NOT send payment at this time - subject to change before final issuance*  
Issue Date: 6/1/2009  
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:

Sunoco., Midwest Terminal  
3866 Fisher Rd  
Columbus, OH 43228

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

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 01-01325

**Facility ID:** 0125040580

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

## Authorization (continued)

Permit Number: 01-01325

Permit Description: Truck loading rack.

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>J001</b>
Company Equipment ID:	Gasoline Truck Loading
Superseded Permit Number:	P0082735
General Permit Category and Type:	Not Applicable



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

**Permit Number:** 01-01325

**Facility ID:** 0125040580

**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 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 a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 01-01325

**Facility ID:** 0125040580

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

**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.



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

**Permit Number:** 01-01325

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

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**Facility ID:** 0125040580

**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.



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

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



1. J001, Gasoline Truck Loading

Operations, Property and/or Equipment Description:

Gasoline/Ethanol

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)b, b)(2), c)(2) & (4), d)(1) & (2), e(1) and f(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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 3745-21-09(Q)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V / MACT)	Limitation applicable to the loading of gasoline:  0.29 pound of VOC per 1,000 gallons (35 milligrams per liter (mg/l)) of gasoline loaded into the gasoline delivery vessel.  Limitation applicable to the loading of fuel ethanol, transmix, and additives:  0.29 pound of VOC per 1,000 gallons (35 mg/l) of fuel ethanol, transmix, and additives loaded into the



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>delivery vessel.</p> <p>Limitation applicable to the loading of distillates (diesel and kerosene):</p> <p>0.016 pound of VOC per 1,000 gallons (1.9 mg/l) of distillates loaded into the distillates delivery vessel.</p> <p>The total annual VOC emissions from gasoline, fuel ethanol, transmix, additives, and distillates loading at the loading rack (emissions unit J001) shall not exceed 67.3 tons per rolling 12-month period (TPY) (including fugitive emissions).</p> <p>See b)(2)a. and c)(4) below</p>

(2) Additional Terms and Conditions

- a. The emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility shall not exceed 9.9 TPY for any individual HAP and 24.9 TPY for any combination of HAPs, based upon rolling, 12-month summations of the HAP emissions.

c) Operational Restrictions

- (1) The loading rack shall be equipped with a vapor collection system whereby during the transfer of gasoline and fuel ethanol to any delivery vessel:
  - a. all vapors displaced from the delivery vessel during loading are vented only to the vapor collection system; and
  - b. the pressure in the vapor collection system is maintained between minus 6 and plus 18 inches of water gauge pressure.
- (2) The loading rack shall be equipped with a vapor control system whereby:
  - a. all vapors collected by the vapor collection system are vented to the vapor control system;
  - b. the mass emissions of VOC from the vapor control system do not exceed 0.67 pound of VOC per 1,000 gallons (80 milligrams of VOC per liter) of gasoline loaded into the delivery vessel; and



- c. any liquid gasoline returned to a stationary storage tank from the vapor control system is free of entrained air to the extent possible with good engineering design.
  - (3) A means shall be provided to prevent drainage of gasoline from the loading device when it is not in use or to accomplish complete drainage before the loading device is connected.
  - (4) Compliance with the emission limitations as stated in Section A.1 shall be achieved by restricting annual throughputs of gasoline (i.e., gasoline, fuel ethanol, transmix, and additives) and distillates (i.e., diesel and kerosene).
    - a. The annual throughput of gasoline [i.e., gasoline, fuel ethanol (as a blend with gasoline), transmix, and additives] shall not exceed 335,000,000 gallons per rolling, 12-month period. Of the 335,000,000 gallons, the annual throughput of ethanol (loaded by itself, as well as loaded with gasoline) shall not exceed 125,000,000 gallons per rolling, 12-month period.
    - b. The annual throughput of distillates shall not exceed 50,000,000 gallons per rolling, 12-month period.

This emissions unit 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 gasoline and distillates throughputs, upon issuance of this permit
  - (5) All fuel loading lines and vapor lines will be equipped with fittings which are vapor tight as defined in OAC rule 3745-21-01(H).
  - (6) The permittee shall not permit gasoline to be spilled, discarded into sewers, stored in open containers, or handled in any other manner that would result in evaporation.
  - (7) The permittee shall repair within 15 days any leaks from the vapor collection system and the vapor control system which are employed to meet the requirements of OAC rule 3745-21-09(Q)(1), when such a leak is equal to or greater than 100% of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.
  - (8) The pilot flame in the flare's pilot light burner shall be maintained at all times during the loading of gasoline (i.e., gasoline, fuel ethanol, transmix, and additives) and distillates (i.e., diesel and kerosene).
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain monthly records of the following information:
    - a. the total throughput of gasoline, in gallons;
    - b. the total throughput of fuel ethanol, in gallons;
    - c. the total throughput of distillates, in gallons;
    - d. the VOC emissions from J001, in tons;
    - e. the rolling, 12-month summation of the total gasoline throughputs, in gallons



- f. the rolling, 12-month summation of the total fuel ethanol throughputs, in gallons;
  - g. the rolling, 12-month summation of the total distillates throughputs, in gallons;
  - h. the rolling, 12-month summation of VOC emissions from J001, in tons;
- (2) The permittee shall on a monthly basis maintain the following information for the entire facility:
- a. the specific HAP emission compound as outlined in Term f)(1)f.;
  - b. the amounts in tons per month of each HAP compound along with the total of all compounds in tons/month (using the emission factors as outlined in Term f)(1)f.;
  - c. the rolling, 12-month summation of HAP emissions; and
  - d. the rolling, 12-month summation of combined HAP emissions.
- (3) The permittee shall implement, within 90 days of the issuance of this permit, a preventive maintenance program (PMP) for the vapor combustion unit (VCU) which has been approved by the Ohio EPA. The PMP shall include an annual inspection of the flare by a qualified individual. The resultant report shall be maintained on site and shall be made available during subsequent inspections by the Ohio EPA.
- (4) The permittee shall maintain the data required by the VCU manufacturer's recommended daily operating guidelines on a daily basis. The permittee shall submit a copy of the operating guidelines checklist to the Ohio EPA, Central District Office within 90 days of the issuance of this permit. Any subsequent revisions to this checklist shall be mutually agreeable to the permittee and the Ohio EPA, Central District Office.
- (5) The permittee shall collect and record the following information each day:
- a. the results of the daily pilot inspections;
  - b. descriptions of any failures of the flame detection system;
  - c. if a failure is detected, record the period of time when gasoline was loaded, until the system is repaired; and
  - d. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- (6) The permittee shall properly install, operate, and maintain a heat-sensing device (e.e. ultraviolet or thermocouple) to indicate the presence of a flame when the emissions unit is in operation. The monitoring device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. Each business day, the operator shall verify that the pilot flame and flame sensor are working during loading operations.
- (7) The permittee shall properly install, operate, and maintain equipment to monitor the pressure in the vapor collection system, while the emissions unit is in operation, to demonstrate compliance with the pressure range established in OAC rule 3745-21-09(Q)(1)(a)(ii). The monitoring equipment shall be installed, calibrated, operated, and



maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

- (8) The permittee shall repair any leak from the vapor collection system and/or vapor control system, that is equal to or greater than 100% of the LEL as propane (as determined under OAC 3745-21-10(K)), within 15 days of detection. The permittee shall maintain a record of each such leak that is not repaired within the 15 days.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

- i. all exceedances of the rolling, 12-month throughput limitations for gasoline;
- ii. all exceedances of the rolling, 12-month throughput limitations for fuel ethanol;
- iii. all exceedances of the rolling, 12-month throughput limitations for distillates;
- iv. all exceedances of the rolling, 12-month VOC emission limitation;
- v. all exceedances of the rolling, 12-month HAP emission limitation; and
- vi. all exceedances of the rolling, 12-month HAPs emission limitation.

all periods during which the flare's pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period and an explanation of any corrective action taken to prevent similar occurrences.

- b. the permittee shall submit the quarterly deviation (excursion) reports in accordance with the Standard Terms and Conditions.
- c. the probable cause of each deviation (excursion);
- d. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- e. 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 (the appropriate District Office or local air agency).

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

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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 limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.29 pound VOC per 1,000 gallons of gasoline loaded

0.29 pound VOC per 1,000 gallons of fuel ethanol, transmix, and additives loaded

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated through the emission tests required pursuant to Section f)(1)h. below. The emission test methods and procedures are those outlined in OAC rule 3745-21-10(E) and specify a minimum of one 6-hour test during which at least 187,500 gallons (709,688 liters) of gasoline are loaded. (The test should be conducted at the maximum gasoline throughput possible.)

b. Emission Limitation:

0.16 pound VOC per 1,000 gallons of distillates loaded

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon emission factors from AP-42, 5th Edition, Table 5.2-5 (1/95) of 0.016 pound of VOC per 1,000 gallons of kerosene and 0.014 pound VOC per 1,000 gallons of diesel.

c. Emission Limitation:

67.3 tons of VOC per rolling 12-month period

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the record keeping in d)(1) above and a summation of the emissions from the VCU, gasoline loading fugitive emissions, and distillate fuel loading emissions as follows:

- i. For the VCU, sum the monthly gasoline throughputs for the 12-month period and multiply this sum by the results of the most recent emission



tests for the VCU (in lbs VOC/1,000 gallons gasoline loaded) and divide by 2,000 lbs/ton.

- ii. For gasoline loading fugitive emission, sum the monthly gasoline throughputs for the 12-month period and divide this sum by 2,000 lbs/ton and multiply by the emission factor (lbs VOC/1,000 gallons gasoline) obtained using Equation 1 from AP-42, Section 5.2 (1/95) multiplied by the overall reduction efficiency term of  $(1 - \text{efficiency} / 100)$  (AP-42, Section 5.2 (1/95), page 5.2-6) using an efficiency of 98.7% (Gasoline Distribution Industry (Stage I) - Background Information from Promulgated Standards, EPA-450/R-94-002b, November 1994, Appendix A, page A-5).
- iii. For distillate fuel loading emissions, sum the distillate fuel throughputs for the 12-month period and divide this sum by 2,000 lbs/ton and multiply by the emission factor 0.016 lb VOC/1,000 gallons fuel obtained from AP-42, Table 5.2-5 (1/95).
- d. VOC fugitive emission (e.g., valves, fittings, and pumps) from the loading rack shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
- e. VOC emission from the storage tanks shall be determined using the USEPA's "TANKS" Program, version 4.0 or newer.
- f. Emission Limitations:  
The emissions of HAPs, as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility shall not exceed 9.9 TPY for any individual HAP and 24.9 TPY for any combination of HAPs, based upon rolling, 12-month summations of the HAP emissions.

**Applicable Compliance Method:**

Compliance with these emission limitations shall be determined as follows:

- i. For individual and combined HAP emissions from the VCU, multiply the VOC emissions from Section f)c.i. above by the following HAP emission factors (obtained from Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards, EPA-450/R-94-002a, January 1994, Table 3-2):

benzene - 0.009 pound of benzene emissions per pound of VOC emissions;

ethyl benzene - 0.001 pound of ethyl benzene emissions per pound of VOC emissions;

hexane - 0.016 pound of hexane emissions per pound of VOC emissions;

toluene - 0.013 pound of toluene emissions per pound of VOC emissions;

xylene - 0.005 pound of xylene emissions per pound of VOC emissions;

2,2,4-trimethylpentane - 0.008 pound of 2,2,4-trimethylpentane emissions per pound of VOC emissions; and

combined HAP - 0.052 pound of combined HAP emissions per pound of VOC emissions.



- ii. For individual and combined fugitive HAP emissions from gasoline loading, multiply the VOC emissions from Section f)c.ii. above by the HAP emission factors specified in Section f)f.i. above.
- iii. For individual and combined HAP emissions from gasoline storage tanks, multiply the VOC emissions (in tons/yr) from all gasoline storage tanks at the facility, as determined using USEPA's "TANKS" Program, version 4 or newer, by the HAP emission factors specified in Section f)f.i. above.
- iv. For individual and combined HAP emissions from fuel ethanol storage tanks, multiply the VOC emissions (in tons/yr) from all fuel ethanol storage tanks at the facility, as determined using USEPA's "TANKS" Program, version 4 or newer, by the HAP emission factors specified in Section E.5.a above, and then by (0.02/0.52). [From Archer Daniels Midland communication to Ohio EPA, Central District Office, September 24, 2004.]
- v. For individual and combined HAP emissions from equipment leaks (i.e., fugitive emissions from valves, flanges, open ended lines, pumps, etc.), multiply the VOC emissions (in tons/yr) from equipment leaks at the facility, as determined using the document "Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), by the HAP emission factors specified in Section f)f.i. above.
- vi. For individual HAP emissions from distillate fuel loading, multiply the VOC emissions from Section f)c.iii. above by the following emission factors derived from using the speciation option of USEPA's "TANKS" Program:
  - benzene - 0.0022 pound of benzene emissions per pound of VOC emissions;
  - ethyl benzene - 0.0031 pound of ethyl benzene emissions per pound of VOC emissions;
  - hexane - 0.00046 pound of hexane emissions per pound of VOC emissions;
  - toluene - 0.0239 pound of toluene emissions per pound of VOC emissions;
  - xylene - 0.0573 pound of xylene emissions per pound of VOC emissions;
  - and
  - 1,2,4-trimethylbenzene - 0.0427 pound of 1,2,4-trimethylbenzene emissions per pound of VOC emissions.
- g. Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Central District Office and the permittee.



- h. Within 24 months after the effective date of this permit and within 12 months prior to the expiration of this permit, the permittee shall conduct or have conducted, emission test(s) for this emissions unit in order to demonstrate continuing compliance with the allowable VOC emission rate. This test shall be conducted between the months of May through September.

No later than 30 days prior to proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office 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.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Ohio EPA, Central District Office within 30 days following completion of the the test(s).

g) **Miscellaneous Requirements**

- (1) None.