



7/31/2014

Kevin Cunningham
Plains Marketing LP - Toronto Terminal
740306 S. 3510 Rd.
Cushing, OK 74023

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

Facility ID: 0641185004
Permit Number: P0115667
Permit Type: Initial Installation
County: Jefferson

Certified Mail

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

Dear Permit Holder:

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

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street Suite 700
PO Box 1049
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501.

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-SEDO; Pennsylvania; West Virginia

PUBLIC NOTICE
7/31/2014 Issuance of Draft Air Pollution Permit-To-Install and Operate

Plains Marketing LP - Toronto Terminal

State Rd 7F,

Toronto, OH 43964

Jefferson County

FACILITY DESC.: Petroleum Bulk Stations and Terminals

PERMIT #: P0115667

PERMIT TYPE: Initial Installation

PERMIT DESC: This is an initial installation for tank storage and barge loading, controlled by a flare, of light crude oil, predominately obtained from fracking wells.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Lesley Jenkins, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501



Permit Strategy Write-Up

1. Check all that apply:

X Synthetic Minor Determination

Netting Determination

2. Source Description: Light crude oil (predominately obtained from oil and gas wells) storage and distribution facility consisting of barge loading controlled with a flare (J001), 4 x 42,000 gal storage tanks w/ internal floating roofs (T001-4) and 4 x 6,300,000 gal storage tanks w/ internal floating roofs (T005-8). Light crude oil is unloaded from trucks into the first set of 4 smaller tanks (T001-4) and then transferred to storage in the 4 larger tanks (T005-8) to await barge loading (J001).
3. Facility Emissions and Attainment Status: Facility wide emissions limitations – 97.4 TPY VOC, 17.09 TPY CO, 9.16 TPY NOx, 0.0026 TPY SO₂, and 0.24 TPY PM₁₀; The facility has taken annual throughput restrictions for all EUs and will install a flare with a 98% control efficiency controlling barge loading to maintain compliance with synthetic minor restrictions.
4. Source Emissions: J001 – 29.08 TPY VOC, 17.09 TPY CO, 9.16 TPY NOx, 0.0026 TPY SO₂, 0.24 TPY PM₁₀; T001-4 – 16.32 TPY VOC; T005-8 – 52.0 TPY VOC
5. Conclusion: The facility has taken a facility-wide synthetic minor restriction on annual light crude oil throughput (438,438,000 gallons per year) to avoid exceeding TV thresholds. EU J001 has a voluntary restriction of 438,438,000 individually, while EUs T001-4 (small tanks) and T005-8 (large tanks) have combined voluntary restrictions because it is possible to push all of the crude oil through one of the tanks in each grouping or distribute it among 2 or more.
6. Please provide additional notes or comments as necessary:

Tanks 4.09d results based on the annual restriction of 438,438,000 gallons estimate VOC emissions for T001-4 to be 16.32 TPY and for T005-8 to be 52.0 TPY operating at approximately 12% of maximum achievable annual operations; Based on this ratio, uncontrolled PTE for each tank estimated to be over 136 TPY for EUs T001-4 and 433 TPY for EUs T005-8 at maximum achievable annual operations. These annual emissions may come from one individual tank or a combination of the 4 tanks in each grouping, depending on how the facility routes the total crude oil throughput.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	97.4
CO	17.09
NOx	9.16
SO ₂	0.0026
PM ₁₀	0.24



DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
Plains Marketing LP - Toronto Terminal

Facility ID:	0641185004
Permit Number:	P0115667
Permit Type:	Initial Installation
Issued:	7/31/2014
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
Plains Marketing LP - Toronto Terminal

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Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0641185004
Application Number(s): A0048823
Permit Number: P0115667
Permit Description: This is an initial installation for tank storage and barge loading, controlled by a flare, of light crude oil, predominately obtained from fracking wells.
Permit Type: Initial Installation
Permit Fee: \$5,250.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 7/31/2014
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:

Plains Marketing LP - Toronto Terminal
State Rd 7F
Toronto, OH 43964

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

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

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Authorization (continued)

Permit Number: P0115667
Permit Description: This is an initial installation for tank storage and barge loading, controlled by a flare, of light crude oil, predominately obtained from fracking wells.

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

Emissions Unit ID:	J001
Company Equipment ID:	J001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T001
Company Equipment ID:	T001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T002
Company Equipment ID:	T002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T003
Company Equipment ID:	T003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T004
Company Equipment ID:	T004
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T005
Company Equipment ID:	T005
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T006
Company Equipment ID:	T006
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T007
Company Equipment ID:	T007
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T008
Company Equipment ID:	T008
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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



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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Southeast 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.

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

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

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

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



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

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.



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. J001, Barge Loading controlled by flare

Operations, Property and/or Equipment Description:

420,000 gallons per hour light crude oil barge loading with a synthetic minor annual throughput restriction of 438,438,000 gallons per year controlled by a 131.02 MMBtu/hr flare (0.31 MMBtu/hr pilot, 18.42 MMBtu/hr enrichment gas, and 112.29 MMBtu/hr controlled vapors) with 100% capture efficiency and 98% control efficiency.

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)e., c)(1)-(5), d)(1)-(2), and e)(3)

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.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.42 tons per month (TPM), averaged over a rolling, 12-month period. Carbon monoxide (CO) emissions shall not exceed 1.42 TPM, averaged over a rolling, 12-month period.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Nitrogen oxide (NO _x) emissions shall not exceed 0.76 TPM, averaged over a rolling, 12-month period. Sulfur dioxide (SO ₂) shall not exceed 0.003 TPM, averaged over a rolling, 12-month period.



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Particulate matter (PM ₁₀) emissions shall not exceed 0.03 TPM, averaged over a rolling 12-month period. See b)(2)a. below.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-31-05(F), as effective 12/01/06	See b)(2)c. below.
e.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid TV)	VOC emissions shall not exceed 55.70 pounds per hour (lbs/hr) and 29.08 tons per year (TPY), as a rolling, 12-month summation. See c)(1) below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂ and PM emissions from this air contaminant source since the uncontrolled potential to emit for SO₂ and PM is less than 10 TPY.

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

PTIO P0115667 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):



i. The annual throughput for this emissions unit shall not exceed 438,438,000 gallons.

ii. NO_x emissions shall not exceed 9.16 TPY.

c) Operational Restrictions

(1) The maximum annual throughput for this emissions unit shall not exceed 438,438,000 gallons, as a rolling 12-month summation.

a. To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Production (Gallons)
1	36,536,500
1-2	73,073,000
1-3	109,609,500
1-4	146,146,000
1-5	182,682,500
1-6	219,219,000
1-7	255,755,500
1-8	292,292,000
1-9	328,828,500
1-10	365,365,000
1-11	401,901,500
1-12	438,438,000

b. After the first 12 calendar months of operation, compliance with the annual limitation shall be based upon a rolling, 12-month summation of the monthly values.

(2) This emissions unit shall not be operated without the associated flare.

(3) The flare shall be operated with a flame present at all times when gases are vented to it.

(4) An automatic flame ignition system shall be installed to meet one of the following requirements:



- a. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. If the pilot flame goes out and does not relight, then an alarm shall sound; or
 - b. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.
- (5) The flare, its auto ignition system, and its recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
- d) **Monitoring and/or Recordkeeping Requirements**
 - (1) The permittee shall:
 - a. continuously monitor the presence of the flame;
 - b. record all periods during which the automatic flare ignition system (pilot flame or electronic arc ignition system) or thermocouple was not working and gas was being vented to the flare/combustion device; and
 - c. record all periods of time during which gas was being vented to the flare/combustion device and there was no flame.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The total quantity of light crude oil loaded into barges, in gallons;
 - b. The rolling, 12-month summation of light crude oil loaded into barges, and for the first 12 calendar months of operation the cumulative total, in gallons;
 - c. The total quantity of VOC emissions; and
 - d. The rolling, 12-month summation of VOC emissions.
- e) **Reporting Requirements**
 - (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
 - (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.



- a. The permittee shall identify the following additional information in the annual permit evaluation report:
 - i. all periods of time when the pilot flame or electronic arc ignition system is not working, including the date, time, and duration of each such period.
- (3) The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances:
 - a. The rolling, 12-month and first 12 months' cumulative light crude oil throughput limitations.
 - b. The rolling, 12-month VOC emissions limitation.
- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

VOC emissions shall not exceed 55.70 lb/hr, 29.08 TPY, and 2.42 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lb/h, TPY, and TPM emissions limitation shall be demonstrated by the following calculations using the AP-42 section 5.2 emission factor for barge loading, AP-42 section 1.4 for the generation of secondary emissions through combustion of light crude vapors in the vapor combustion unit, the maximum hourly throughput, the maximum annual throughput (438,438,000 gal/yr), the maximum hourly and annual heat loading to the vapor combustion unit, and the control efficiency of the flare (98%):

$$\text{Barge Loading Loss (L}_L\text{) (in lbs/1000 gal)} = 12.46 \frac{\text{SPM}}{T}$$

$$S \text{ (S factor)} = 0.5$$

$$P \text{ (true vapor pressure)} = 11.1 \text{ psia}$$

$$M \text{ (molecular weight)} = 50 \text{ lb/lb-mole}$$

$$T \text{ (temperature)} = 528^\circ \text{ Rankin}$$

$$L_L = 6.55 \text{ lbs/1000 gal}$$

$$6.55 \text{ lbs/1000 gal} * 438,438 \text{ thousand gal/yr} * 1 \text{ ton/2000 lbs} = 1,435.88 \text{ TPY uncontrolled, and}$$



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$$139,132 \text{ MMBtu/yr} * 5.39\text{E-}03 \text{ lb/MMBtu} * 1 \text{ ton/2000 lbs} = 0.38 \text{ TPY}$$

$$1,435.88 \text{ TPY} * (1 - 0.98) + 0.38 = \mathbf{29.08 \text{ TPY controlled}}$$

$$(29.08 \text{ TPY}) / (12 \text{ mos/yr}) = \mathbf{2.42 \text{ TPM}}$$

$$6.55 \text{ lbs/1000 gal} * 420,000 \text{ gal/hr} = 2,750 \text{ lb/hr uncontrolled, and}$$

$$131.02 \text{ MMBtu/hr} * 5.39\text{E-}03 \text{ lb/MMBtu} = 0.71 \text{ lb/hr}$$

$$2,750 \text{ lb/hr} * (1 - 0.98) + 0.71 = \mathbf{55.70 \text{ lb/hr controlled}}$$

If required, VOC emissions shall be determined according to test Methods 1 - 4, and 25 or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

CO emissions shall not exceed 1.42 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitation shall be demonstrated by the following calculations using the AP-42 Table 1.4-1 emission factor (84 lbs CO/MMscf) for pilot and enrichment gas emissions and the TNRCC RG-109 "Air Permits Technical Guidance for Chemical Sources: Flares and Vapor Oxidizers", Table 4 emission factor (0.276 lb CO/MMBtu) for "flares combusting high-Btu waste streams" for emissions from combustion of controlled vapors:

Pilot:

$$84 \text{ lbs/MMscf} * 300 \text{ scf/hr} * 1 \text{ MMscf/1,000,000 scf} * 8760 \text{ hrs/yr} * 1 \text{ ton/2000 lbs} = 0.11 \text{ TPY}$$

Enrichment Gas:

$$84 \text{ lbs/MMscf} * 18,060 \text{ scf/hr} * 1 \text{ MMscf/1,000,000 scf} = 1.52 \text{ lb/hr}$$

$$(1.52 \text{ lb/hr}) / (18.42 \text{ MMBtu/hr}) = 0.083 \text{ lb/MMBtu}$$

$$0.083 \text{ lb/MMBtu} * 19,230 \text{ MMBtu/yr (as submitted in application)} * 1 \text{ ton/2000 lbs} = 0.80 \text{ TPY}$$

Controlled Vapors:

$$0.276 \text{ lb/MMBtu} * 117,221 \text{ MMBtu/yr (as submitted in application)} * 1 \text{ ton/2000 lbs} = 16.18 \text{ TPY}$$



Total: 0.11 TPY + 0.80 TPY + 16.18 TPY = **17.09 TPY**

(17.09 TPY) / (12 mos/yr) = **1.42 TPM**

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emissions Limitations:

NO_x emissions shall not exceed 0.76 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitation shall be demonstrated by the following calculations using the AP-42 Table 1.4-1 emission factor (100 lbsNO_x/MMscf) for pilot and enrichment gas emissions and the TNRCC RG-109 "Air Permits Technical Guidance for Chemical Sources: Flares and Vapor Oxidizers", Table 4 emission factor (0.138 lbNO_x/MMBtu) for "flares combusting high-Btu waste streams" for emissions from combustion of controlled vapors:

Pilot:

100 lbs/MMscf * 300 scf/hr * 1MMscf/1,000,000 scf * 8760 hrs/yr * 1 ton/2000 lbs = 0.13 TPY

Enrichment Gas:

100 lbs/MMscf * 18,060 scf/hr * 1MMscf/1,000,000 scf = 1.806 lb/hr

(1.81 lb/hr) / (18.42 MMBtu/hr) = 0.098 lb/MMBtu

0.098 lb/MMBtu * 19,230 MMBtu/yr (as submitted in application) * 1 ton/2000 lbs = 0.94 TPY

Controlled Vapors:

0.138 lb/MMBtu * 117,221 MMBtu/yr (as submitted in application) * 1 ton/2000 lbs = 8.09 TPY

Total: 0.13 TPY + 0.94 TPY + 8.09 TPY = **9.16 TPY**

(9.16 TPY) / (12 mos/yr) = **0.76 TPM**

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative



U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emission Limitation:

SO₂ shall not exceed 0.003 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitation shall be demonstrated by the following calculations using the AP-42 Table 1.4-2 emission factor (0.6 lbs SO₂/MMscf):

Pilot:

$$0.6 \text{ lbs/MMscf} * 300 \text{ scf/hr} * 1 \text{ MMscf}/1,000,000 \text{ scf} * 8760 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 0.00079 \text{ TPY}$$

Enrichment Gas:

$$0.6 \text{ lbs/MMscf} * 18,060 \text{ scf/hr} * 1 \text{ MMscf}/1,000,000 \text{ scf} = 0.011 \text{ lb/hr}$$

$$(0.011 \text{ lb/hr}) / (18.42 \text{ MMBtu/hr}) = 0.00059 \text{ lb/MMBtu}$$

$$0.00059 \text{ lb/MMBtu} * 19,230 \text{ MMBtu/yr (as submitted in application)} * 1 \text{ ton}/2000 \text{ lbs} = 0.0057 \text{ TPY}$$

Controlled Vapors:

$$117,221 \text{ MMBtu/yr} * 0.6 \text{ lb/mm scf} / 1,020 \text{ Btu/scf} * 1 \text{ ton}/2000 \text{ lbs} = 0.0345 \text{ TPY}$$

$$\text{Total: } 0.00079 \text{ TPY} + 0.0057 \text{ TPY} + 0.0345 \text{ TPY} = \mathbf{0.041 \text{ TPY}}$$

$$(0.041 \text{ TPY}) / (12 \text{ mos/yr}) = \mathbf{0.003 \text{ TPM}}$$

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office

e. Emissions Limitations:

PM₁₀ shall not exceed 0.03 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitation shall be demonstrated by the following calculations using the AP-42 Table 1.4-2 emission factor (5.7 lbs condensable PM/MMscf):



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Pilot:

$5.7 \text{ lbs/MMscf} * 300 \text{ scf/hr} * 1\text{MMscf}/1,000,000 \text{ scf} * 8760 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 0.0075 \text{ TPY}$

Enrichment Gas:

$5.7 \text{ lbs/MMscf} * 18,060 \text{ scf/hr} * 1\text{MMscf}/1,000,000 \text{ scf} = 0.10 \text{ lb/hr}$

$(0.10 \text{ lb/hr}) / (18.42 \text{ MMBtu/hr}) = 0.0054 \text{ lb/MMBtu}$

$0.0054 \text{ lb/MMBtu} * 19,230 \text{ MMBtu/yr (as submitted in application)} * 1 \text{ ton}/2000 \text{ lbs} = 0.054 \text{ TPY}$

Controlled Vapors:

$117,221 \text{ MMBtu/yr} * 5.7 \text{ lb/mm scf} / 1,020 \text{ Btu/scf} * 1 \text{ ton}/2000 \text{ lbs} = 0.33 \text{ TPY}$

Total: $0.0075 \text{ TPY} + 0.054 \text{ TPY} + 0.33 \text{ TPY} = \mathbf{0.39 \text{ TPY}}$

$(0.39 \text{ TPY}) / (12 \text{ mos/yr}) = \mathbf{0.03 \text{ TPM}}$

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 TPY. OAC Chapter 3745 31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745 31 01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 TPY may require the permittee to apply for and obtain a new PTIO.



2. T001-T004, Tank #'s 1 - 4

Operations, Property and/or Equipment Description:

EU ID	Operations, Property and/or Equipment Description
T001	42,000 gallon (1,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T001-4.
T002	42,000 gallon (1,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T001-4.
T003	42,000 gallon (1,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T001-4.
T004	42,000 gallon (1,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T001-4.

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.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 1.36 TPM, averaged over a rolling, 12-month period. The requirements of this rule include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb. See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid TV)	VOC emissions shall not exceed 3.73 lbs/hr and 16.32 TPY, as a rolling, 12-month summation.
c.	40 CFR Part 60, Subpart Kb (40 CFR 60.110b-60.117b) [In accordance with 40 CFR 60.110b, this emissions unit is a storage vessel with a capacity greater than or equal to 75 cubic meters (m ³) (19,812.9 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.]	The permittee shall equip each storage vessel with a fixed roof in combination with an internal floating roof that meets the specifications of 40 CFR 60.112b(a)(1).
d.	40 CFR, Part 60, Subpart A [40 CFR 60.1 through 60.9]	General Provisions
e.	OAC rule 3745-21-09(L)	The requirements of this rule are equivalent to the requirements of 40 CFR, 60, Subpart Kb.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i)	internal floating roof shall rest or float on the liquid surface at all times, except during initial fill, when empty or when emptied and refilled; when internal roof is resting on leg supports, filling, emptying and refilling shall be continuous and rapid
60.112b(a)(1)(ii)	each internal roof shall be equipped with one of the following: (A) liquid-mounted seal made up of a foam- or liquid-filled seal mounted in contact with the liquid, (B) two seals mounted one above the other so that each forms a continuous



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	closure that completely cover the space between the wall of the storage vessel and the edge of the internal floating roof (lower seal may be vapor-mounted), or (C) mechanical shoe seal
60.112b(a)(1)(iii)	each opening in a noncontact internal floating roof (except for automatic bleeder vents, vacuum breaker vents, and the rim space vents) is to provide projection below the liquid surface
60.112b(a)(1)(iv)	each opening in the internal floating roof (except for leg sleeves, automatic bleeder and rim space vents, column, ladder and sample wells, and stub drains) is to be equipped with a cover or lid, equipped with a gasket, to be maintained closed at all times except when device is in use; covers on each access hatch and automatic gauge float well shall be bolted except when in use
60.112b(a)(1)(v)	automatic bleeder vents shall be equipped with a gasket and open only when internal floating roof is not floating or at the manufacturer's recommended setting
60.112b(a)(1)(vi)	rim space vents shall be equipped with a gasket and open only when the internal floating roof is not floating or at the manufacturer's recommended setting
60.112b(a)(1)(vii)	all sampling shall be done through the sampling well, equipped with a slit fabric cover that covers at least 90% of the opening
60.112b(a)(1)(viii)	each opening in the internal floating roof allowing for passage of a fixed-roof support column shall have a flexible fabric sleeve seal or a gasketed sliding cover
60.112b(a)(1)(ix)	each opening in the internal floating roof allowing for passage of a ladder shall have a gasketed sliding cover



(2) The total maximum annual throughput for T001-T004 units shall not exceed 438,438,000 gallons, as a rolling, 12-month summation.

a. To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Production (Gallons)
1	36,536,500
1-2	73,073,000
1-3	109,609,500
1-4	146,146,000
1-5	182,682,500
1-6	219,219,000
1-7	255,755,500
1-8	292,292,000
1-9	328,828,500
1-10	365,365,000
1-11	401,901,500
1-12	438,438,000

b. After the first 12 calendar months of operation, compliance with the annual limitation shall be based upon a rolling, 12-month summation of the monthly values.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.113b(a)(1)	visual inspections and repair of holes, tears or other openings or defects in the internal floating roof, primary seal or seal fabric prior to filling storage vessel
60.113b(a)(2)	visual inspections of the internal floating roof and primary seal through manholes and roof hatches on the fixed-roof at least



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	once every 12 months after initial fill; if the internal floating roof is not resting on the surface of the VOL, there is liquid accumulated on the roof, the seal is detached or there are holes or tears in the seal fabric, storage vessel must be repaired or emptied and removed from service within 45 days; 30-day extension may be requested as required by 60.115b(a)(3)
60.113b(a)(4)	visual inspections each time the storage vessel is emptied or degassed and at least once every 10 years of the internal floating roof for defects, the primary seal and seal fabric for holes, tears or other openings, the gaskets for leaks, slotted membranes for more than 10% open area and sleeve seals and repair prior to fill refilling
60.115b(a)(2)	record of each inspection required pursuant to 60.113b(a)(1)-(4), including storage vessel identification, date inspection performed and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings)
60.116b	(a) 2 year records retention (b) records of each storage vessel dimension and capacity readily accessible (c) records of the VOL stored in each vessel, the period of storage and the maximum true vapor pressure (TVP) of that VOL during storage period

- (2) The permittee shall maintain records of the following information for each fixed roof tank equipped with an internal floating roof.
- the types of petroleum liquids stored in the tank; and
 - the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.



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. The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit and per the rules.

- (3) The permittee shall maintain monthly records of the following information:
- a. The total quantity of light crude oil throughput, in gallons;
 - b. The rolling, 12-month summation of light crude oil throughput, and for the first 12 calendar months of operation the cumulative total, in gallons;
 - c. The total quantity of VOC emissions; and
 - d. The rolling, 12-month summation of VOC emissions.

e) Reporting Requirements

- (1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.7(a)(3) and 60.115b(a)(1)	notification of initial startup date and certification that control equipment meets specifications in 60.112b(a) and 60.113b(a) postmarked within 15 days
60.113b(a)(5)	30-day written notification prior to filling or refilling a storage vessel requiring a visual inspection per 60.113b(a)(1) and (4); immediate telephone and 7-day written notification prior to unplanned inspections or refilling
60.115b(a)(3)	report identifying any annual inspection that detects conditions described in 60.113b(a)(2), including storage vessel identification, nature of defects and date/nature of repair or date the storage vessel was emptied, within 30 days of inspection

- (2) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (3) 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



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permittees 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.

- (4) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.
- (5) The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances:
 - a. The rolling, 12-month and first 12 calendar months' cumulative light crude oil throughput limitations.
 - b. The rolling, 12-month VOC emissions limitation.

f) Testing Requirements

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

Total VOC emissions from T001-T004 shall not exceed 1.36 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitations shall be determined using records required by d)(2) and d)(3) and in accordance with the TANKS 4.0.9d program for uncontrolled losses from normal tank operations (maximum potential per the permittee's application), physical characteristics of the tank, crude oil properties and site-specific weather condition information provided in the permittee's application and the emissions estimation equations in AP-42 Section 7.1.3.2 (11/06). Compliance with the TPM emissions limitation shall be demonstrated by dividing the results of the following equations by 12 months per year:

Normal tank operations:

X = annual VOC emissions from T001-T004 for normal operations as calculated using the TANKS 4.0.9d program.

Roof landing episodes:

Y = annual VOC emissions from T001-T004 from roof landings as calculated using the following equation:



$$\sum_{i=1}^N L_{TL}$$

where:

N = number of roof landing episodes during the year; and

L_{TL} = total losses during roof landing, lb per landing episode as provided in the permittee's application;

Total VOC emissions:

$$\text{VOC (tons per year)} = X + Y$$

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 TPY. OAC Chapter 3745 31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745 31 01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 TPY may require the permittee to apply for and obtain a new PTIO.



3. T005 – T008, Tank #'s 5 - 8

Operations, Property and/or Equipment Description:

EU ID	Operations, Property and/or Equipment Description
T005	6,300,000 gallon (150,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T005-8.
T006	6,300,000 gallon (150,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T005-8.
T007	6,300,000 gallon (150,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T005-8.
T008	6,300,000 gallon (150,000 barrel) light crude oil fixed-roof storage tank with internal floating roof with a combined annual throughput restriction of 438,438,000 gallons for T005-8.

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., c)(2), d)(2)-(3), and e)(5)

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.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 4.33 TPM, averaged over a rolling, 12-month period. The requirements of this rule include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid TV)	VOC emissions shall not exceed 11.87 lbs/hr and 52.00 TPY, as a rolling, 12-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		month summation.
c.	40 CFR Part 60, Subpart Kb (40 CFR 60.110b-60.117b) [In accordance with 40 CFR 60.110b, this emissions unit is a storage vessel with a capacity greater than or equal to 75 cubic meters (m ³) (19,812.9 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.]	The permittee shall equip each storage vessel with a fixed roof in combination with an internal floating roof that meets the specifications of 40 CFR 60.112b(a)(1).
d.	40 CFR, Part 60, Subpart A [40 CFR 60.1 through 60.9]	General Provisions
e.	OAC rule 3745-21-09(L)	The requirements of this rule are equivalent to the requirements of 40 CFR, 60, Subpart Kb.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.112b(a)(1)(i)	internal floating roof shall rest or float on the liquid surface at all times, except during initial fill, when empty or when emptied and refilled; when internal roof is resting on leg supports, filling, emptying and refilling shall be continuous and rapid
60.112b(a)(1)(ii)	each internal roof shall be equipped with one of the following: (A) liquid-mounted seal made up of a foam- or liquid-filled seal mounted in contact with the liquid, (B) two seals mounted one above the other so that each forms a continuous



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	closure that completely cover the space between the wall of the storage vessel and the edge of the internal floating roof (lower seal may be vapor-mounted), or (C) mechanical shoe seal
60.112b(a)(1)(iii)	each opening in a noncontact internal floating roof (except for automatic bleeder vents, vacuum breaker vents, and the rim space vents) is to provide projection below the liquid surface
60.112b(a)(1)(iv)	each opening in the internal floating roof (except for leg sleeves, automatic bleeder and rim space vents, column, ladder and sample wells, and stub drains) is to be equipped with a cover or lid, equipped with a gasket, to be maintained closed at all times except when device is in use; covers on each access hatch and automatic gauge float well shall be bolted except when in use
60.112b(a)(1)(v)	automatic bleeder vents shall be equipped with a gasket and open only when internal floating roof is not floating or at the manufacturer's recommended setting
60.112b(a)(1)(vi)	rim space vents shall be equipped with a gasket and open only when the internal floating roof is not floating or at the manufacturer's recommended setting
60.112b(a)(1)(vii)	all sampling shall be done through the sampling well, equipped with a slit fabric cover that covers at least 90% of the opening
60.112b(a)(1)(viii)	each opening in the internal floating roof allowing for passage of a fixed-roof support column shall have a flexible fabric sleeve seal or a gasketed sliding cover
60.112b(a)(1)(ix)	each opening in the internal floating roof allowing for passage of a ladder shall have a gasketed sliding cover



(2) The total maximum annual throughput for T005-T008 unit shall not exceed 438,438,000 gallons, as a rolling, 12-month summation.

a. To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Production (Gallons)
1	36,536,500
1-2	73,073,000
1-3	109,609,500
1-4	146,146,000
1-5	182,682,500
1-6	219,219,000
1-7	255,755,500
1-8	292,292,000
1-9	328,828,500
1-10	365,365,000
1-11	401,901,500
1-12	438,438,000

b. After the first 12 calendar months of operation, compliance with the annual limitation shall be based upon a rolling, 12-month summation of the monthly values.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.113b(a)(1)	visual inspections and repair of holes, tears or other openings or defects in the internal floating roof, primary seal or seal fabric prior to filling storage vessel
60.113b(a)(2)	visual inspections of the internal floating roof and primary seal through manholes and roof hatches on the fixed-roof at least



	once every 12 months after initial fill; if the internal floating roof is not resting on the surface of the VOL, there is liquid accumulated on the roof, the seal is detached or there are holes or tears in the seal fabric, storage vessel must be repaired or emptied and removed from service within 45 days; 30-day extension may be requested as required by 60.115b(a)(3)
60.113b(a)(4)	visual inspections each time the storage vessel is emptied or degassed and at least once every 10 years of the internal floating roof for defects, the primary seal and seal fabric for holes, tears or other openings, the gaskets for leaks, slotted membranes for more than 10% open area and sleeve seals and repair prior to fill refilling
60.115b(a)(2)	record of each inspection required pursuant to 60.113b(a)(1)-(4), including storage vessel identification, date inspection performed and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings)
60.116b	<p>(a) 2 year records retention</p> <p>(b) records of each storage vessel dimension and capacity readily accessible</p> <p>(c) records of the VOL stored in each vessel, the period of storage and the maximum true vapor pressure (TVP) of that VOL during storage period</p>

- (2) The permittee shall maintain records of the following information for each fixed roof tank equipped with an internal floating roof.
- a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.



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. The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit and per the rules.

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

- a. The total quantity of light crude oil throughput, in gallons;
- b. The rolling, 12-month summation of light crude oil throughput, and for the first 12 calendar months of operation, the cumulative total, in gallons;
- c. The total quantity of VOC emissions; and
- d. The rolling, 12-month summation of VOC emissions.

e) Reporting Requirements

(1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart Kb, including the following sections:

60.7(a)(3) and 60.115b(a)(1)	notification of initial startup date and certification that control equipment meets specifications in 60.112b(a) and 60.113b(a) postmarked within 15 days
60.113b(a)(5)	30-day written notification prior to filling or refilling a storage vessel requiring a visual inspection per 60.113b(a)(1) and (4); immediate telephone and 7-day written notification prior to unplanned inspections or refilling
60.115b(a)(3)	report identifying any annual inspection that detects conditions described in 60.113b(a)(2), including storage vessel identification, nature of defects and date/nature of repair or date the storage vessel was emptied, within 30 days of inspection

(2) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

(3) 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



Draft Permit-to-Install and Operate

Plains Marketing LP - Toronto Terminal

Permit Number: P0115667

Facility ID: 0641185004

Effective Date: To be entered upon final issuance

permittees 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.

- (4) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.
- (5) The permittee shall submit quarterly deviation (excursion) reports which identify the following exceedances:
 - a. The rolling, 12-month and first 12 calendar months' cumulative light crude oil throughput limitations.
 - b. The rolling, 12-month VOC emissions limitation.

f) Testing Requirements

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

Total VOC emissions from T005-T008 shall not exceed 51.98 TPY and 4.33 TPM, averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual and TPM emissions limitations shall be determined using records required by d)(2) and d)(3) and in accordance with the TANKS 4.0.9d program for uncontrolled losses from normal tank operations (maximum potential per the permittee's application), physical characteristics of the tank, crude oil properties and site-specific weather condition information provided in the permittee's application and the emissions estimation equations in AP-42 Section 7.1.3.2 (11/06). Compliance with the TPM emissions limitation shall be demonstrated by dividing the results of the following equations by 12 months per year:

Normal tank operations:

X = annual VOC emissions from T005-T008 for normal operations as calculated using the TANKS 4.0.9d program.

Roof landing episodes:

Y = annual VOC emissions from T005-T008 from roof landings as calculated using the following equation:



$$\sum_{i=1}^N L_{TL}$$

where:

N = number of roof landing episodes during the year; and

L_{TL} = total losses during roof landing, lb per landing episode as provided in the permittee's application.

Total VOC emissions:

$$\text{VOC (tons per year)} = X + Y$$

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 TPY. OAC Chapter 3745 31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745 31 01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 TPY may require the permittee to apply for and obtain a new PTIO.