



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
HAMILTON COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 14-05240**

**DATE: 7/16/2002**

Equilon Enterprises  
Richard Lewis  
PO Box 2648 777 Walker Street  
Houston, TX 772522099

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

HCDES

Kathy Clayton City of Cincinnati-OEM



**Permit To Install  
Terms and Conditions**

**Issue Date: 7/16/2002  
Effective Date: 7/16/2002**

**FINAL PERMIT TO INSTALL 14-05240**

Application Number: 14-05240  
APS Premise Number: 1431073227  
Permit Fee: **\$6200**  
Name of Facility: Equilon Enterprises  
Person to Contact: Richard Lewis  
Address: PO Box 2648 777 Walker Street  
Houston, TX 772522099

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**5150 River Road  
Cincinnati, Ohio**

Description of proposed emissions unit(s):  
**Loading Rack J001 Storage Tanks T013-T020.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued: 7/16/2002**

**Facility ID: 1431073227**

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued: 7/16/2002**

**Facility ID: 1431073227**

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued: 7/16/2002**

**Facility ID: 1431073227**

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	66.19

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
J001 - 4 lane truck loading rack with vapor combustion unit.	OAC rule 3745-31-05(A)(3)	273.59 lbs volatile organic compound(VOC)/day  The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart XX and OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D)	See A.2.c  See terms A.2.a., A.2.b. and B.12.
	40 CFR Part 60, Subpart XX	The mass emissions of volatile organic compounds (VOC) from the vapor control system shall not exceed 0.29 pound of VOC per 1000 gallons (35 milligrams of VOC per liter) of gasoline loaded into the delivery vessel.  See terms B.5 - B.10
	OAC rule 3745-21-09(Q)	See terms B.1.- B.4, B.11 and B.13  The emission limitation specified by

**Equilc**  
**PTI A**  
**Issued: 7/16/2002**

Emissions Unit ID: **J001**

this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart XX and OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

- 2.a** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.b** The total VOC emissions from this emissions unit shall not exceed 51 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for J001</u>
1	25.5
1-2	25.5
1-3	25.5
1-4	25.5
1-5	25.5
1-6	25.5
1-7	29.75
1-8	34.0
1-9	38.25
1-10	42.5
1-11	46.75
1-12	51.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions unit J001 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a thermal incinerator (vapor combustion unit) and compliance with the emissions limitations.

## **B. Operational Restrictions**

1. The loading rack shall be equipped with a vapor collection system whereby during the transfer of gasoline to any delivery vessel:
  - a. All vapors displaced from the delivery vessel during loading are vented only to the vapor collection system.

Emissions Unit ID: **J001**

- 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. 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 disconnected.
4. All gasoline loading lines and vapor lines shall be equipped with fittings which are vapor tight.
5. The design of the system shall prevent vapors (total organic compounds) collected at one loading rack from passing to another.
6. Gasoline loadings shall be made only into gasoline tank trucks equipped with vapor collection equipment compatible with the terminal's vapor collection system.
7. The terminal's and the tank truck's vapor collection systems shall be connected during each loading of a gasoline tank truck at this emissions unit. This may include training drivers in the hook-up procedures and posting visible reminder signs at this emissions unit.
8. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4500 pascals (450 mm of water) during product loading. This level shall not be exceeded when measured by the procedures specified in 40 CFR 60.503(d).
9. No pressure-vacuum vent in the terminal's vapor collection system shall begin to open at a system pressure less than 4500 pascals (450 mm of water).
10. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:
  - a. Obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck loaded at this emissions unit.
  - b. Require the tank identification number to be recorded as each gasoline tank truck is loaded at this emissions unit.
  - c. Cross-check each tank identification number obtained in Section B.10.b. above with the file for tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.
  - d. Notify the owner or operator of each nonvapor-tight gasoline tank truck loaded at this emissions unit within 3 weeks after the loading has occurred.
  - e. Not allow the reloading of nonvapor-tight gasoline trucks at this emissions unit until the

12

**Equilc**

**PTI A**

**Issued: 7/16/2002**

Emissions Unit ID: **J001**

vapor tightness documentation for the truck is obtained.

11. The permittee shall not permit gasoline to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.
12. The average combustion temperature within the thermal incinerator (vapor combustion unit), for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
13. The permittee shall repair within 15 days any leak from the vapor collection system and vapor control system when such 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.

### C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit :
  - a. The identification of each material loaded.
  - b. The amount in gallons of each material loaded.
  - c. The vapor pressure of each material loaded, in psia.
  - d. The molecular weight of each material loaded, in lb/lb-mole.
  - e. The total monthly VOC emissions from this emissions unit, in tons.
  - f. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total VOC emissions from this emissions unit, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from this emissions unit.

2. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).

- c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
- d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

3. The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
4. The permittee shall maintain records, at the terminal, of the tank truck vapor tightness documentation required under Section B.10.a, in accordance with 40 CFR 60.505(b). The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by 40 CFR Part 60, Appendix A, Method 27.
  5. Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. The record of each

monthly leak inspections shall include the following at a minimum:

- a. Date of inspection.
- b. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
- c. Leak determination method.
- d. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
- e. Inspector name and signature.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.a and A.2.b.
2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified in term B.12.
3. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 60 days after achieving maximum production but no later than 180 days after initial start-up of this emissions unit.
  - b. The emission testing shall be conducted to demonstrate compliance with the mass emission limit of 0.29 pound of VOC per 1000 gallons loaded.

- c. The compliance test methods and procedures for the emission test for this emission unit shall follow those specified in OAC rule 3745-21-10(E) and 40 CFR 60.503.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

- 2. Compliance with the emission limitations specified in terms A.2.a and A.2.b may be demonstrated by use of the following methods:
  - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
  - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
  - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
  - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive

emissions from the loading process. The controlled VOC emissions from the load out of gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.

- e. Compliance with the HAP emission limitations specified in A.2.a may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

#### **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T013 - 42,000 gallon internal floating roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an

internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.

- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12-month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

Emissions Unit ID: **T013**

supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

- ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
- iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

**2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

- 1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- 2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
- 3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
- 4. The permittee shall maintain monthly records of the following information for emissions units

T013-T020, combined:

- a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.
- b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.

3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:
  - a. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
  - b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL(volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure

that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
  - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
  - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
- d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.
- e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to

the refilling.

2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:
  - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
  - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
  - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
  - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out offgasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
  - e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

#### **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T014 - 2,730,000 gallon internal floating roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

### 2. Additional Terms and Conditions

Emissions Unit ID: **T014**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

- (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- 2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.

- b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year..
3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:

Emissions Unit ID: **T014**

- a. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
  - b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 60.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
- a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit

P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL(volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage

Emissions Unit ID: T014

capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
    - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
    - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
  - d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.
  - e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:

- a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
- b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
- c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
- d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out of gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
- e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

#### **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T015 - 1,260,000 gallon internal floating roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an

internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.

- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

- (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

**2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

- 1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- 2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
- 3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
- 4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.

Emissions Unit ID: **T015**

- b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:
  - a. Furnish the Administrator with a report that describes the control equipment and certifies

that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

- b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
- a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

**Emissions Unit ID: T015**

P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL (volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will

assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
    - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
    - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
  - d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.
  - e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:

Emissions Unit ID: **T015**

- a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
- b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
- c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
- d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out offgasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
- e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

#### **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T016 - 2,100,000 gallon internal floating roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1.  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

### 2. Additional Terms and Conditions

Emissions Unit ID: **T016**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

- (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

Emissions Unit ID: T016

- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- 2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.
  - b. Beginning after the first 12 calendar months of operation following issuance of this permit,

the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:
  - a. Furnish the Administrator with a report that describes the control equipment and certifies

Emissions Unit ID: T016

that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

- b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 60.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
- d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL(volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric

or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

- b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
  - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
  - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
- d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.

Emissions Unit ID: T016

- e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:
    - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
    - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
    - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
    - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out off gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
    - e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

Emissions Unit ID: **T016**

Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T017 - 1,260,000 gallon internal floating roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1.  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY

based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating

roof:

- (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

**2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

- 1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- 2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
- 3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
- 4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.

Emissions Unit ID: **T017**

- b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:
  - a. Furnish the Administrator with a report that describes the control equipment and certifies

that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

- b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
- a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

**Emissions Unit ID: T017**

P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL (volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will

assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
    - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
    - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
  - d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.
  - e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:

Emissions Unit ID: **T017**

- a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
- b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
- c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
- d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out off gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
- e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

#### **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T018 - 1,260,000 gallon fixed cone roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term C.1
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

Emissions Unit ID: **T018**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

1. The permittee shall not store any material with a vapor pressure greater than or equal to 0.507 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.
  - b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

**Emissions Unit ID: T018**

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
5. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:
  - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
  - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
  - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
  - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out off gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
  - e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

**Emissions Unit ID: T018**

Company.

2. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

- The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T019 - 2,100,000 gallon fixed cone roof petroleum storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term C.1
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

### 2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

1. The permittee shall not store any material with a vapor pressure greater than or equal to 0.507 psia in this emissions unit.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.
  - b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. Construction date (no later than 30 days after such date);
  - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
  - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
5. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:
  - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
  - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
  - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
  - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out off gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
  - e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline

Company.

2. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T020 - 630,000 gallon internal floating roof ethanol storage tank.	OAC rule 3745-31-05(A)(3)	See terms A.2.c and B.1.  The requirements of this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60 Subpart Kb.
	OAC rule 3745-31-05(D)	See terms A.2.b and A.2.c
	40 CFR Part 60 Subpart Kb	See term A.2.d
	OAC rule 3745-21-09(L) (when petroleum liquids are stored)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Kb.
	OAC rule 3745-21-07(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

Emissions Unit ID: **T020**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an internal floating roof storage tank with submerged fill and compliance with 40 CFR 60 Subpart Kb.
- 2.b** The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the HAP emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Emissions for Individual HAPs in Tons</u>	<u>Maximum Allowable Cumulative Emissions for Combined HAPs in Tons</u>
1	5.0	12.5
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5
1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual HAP emission limitations shall be based upon a rolling, 12-month summation of the HAP emission figures.

- 2.c** The total VOC emissions from emissions units T013-T020 shall not exceed 15.19 TPY

based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC emission levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative VOC emissions for emissions units T013-T020 in Tons</u>
1	7.6
1-2	7.6
1-3	7.6
1-4	7.6
1-5	7.6
1-6	7.6
1-7	8.87
1-8	10.14
1-9	11.41
1-10	12.68
1-11	13.95
1-12	15.19

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitation for emissions units T013-T020 shall be based upon a rolling, 12- month summation of the VOC emission figures.

- 2.d** The permittee shall equip the storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications:
- i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
  - ii. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

- (a) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- 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 a projection below the liquid surface.
  - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90

percent of the opening.

- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

- 2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

## **B. Operational Restrictions**

- 1. The permittee shall not store any material with a vapor pressure greater than or equal to 11.11 psia in this emissions unit.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee, as specified in 40 CFR 60.116b(b), shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
  - a. The identification and type of each material liquid stored in this emissions unit.
  - b. The maximum true vapor pressure, in psia, as stored, of each material.
  - c. The density of the material stored, in pounds per gallon.
  - d. The total throughput of each material, in gallons.
3. The permittee shall maintain monthly records of the total emissions of VOC, in tons for this emissions unit:
4. The permittee shall maintain monthly records of the following information for emissions units T013-T020, combined:
  - a. The total combined monthly VOC emissions from emissions units T013-T020, in tons.
  - b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the total combined VOC emissions from emissions units T013-T020, in tons.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative combined VOC emissions from emissions units T013-T020 for each calendar month.

5. The permittee shall maintain the following monthly records for all of the emissions units at this facility:
  - a. The total individual HAP emissions for each HAP, in tons.
  - b. The total combined HAPs emissions, in tons (the sum of a).
  - c. The updated rolling, 12-month summation of the total individual HAP emissions for each

HAP, in tons. This shall include the information for the current month and the preceding eleven calendar months.

- d. The updated rolling, 12-month summation of the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative individual HAP emissions for each HAP and the total combined HAP's emissions for each calendar month.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative levels identified in terms A.2.b and A.2.c.
2. The permittee shall submit an annual report which specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
3. After installing control equipment in accordance with 40 CFR 60.112b(a)(1) (fixed roof and internal floating roof), the permittee shall meet the following reporting requirements:
  - a. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
  - b. Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - c. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature

of and date the repair was made.

- d. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made.
4. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
    - a. Construction date (no later than 30 days after such date);
    - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
    - c. Actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available; and
    - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any record showing that any material stored in the tank exceeded the vapor pressure limit in term B.1 for this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. After installing the control equipment required to meet 40 CFR 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
  - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL(volatile organic liquid). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
  - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
  - c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):
    - i. Visually inspect the vessel as specified in paragraph (a)(4) of 40 CFR 60.113b at least every 5 years; or
    - ii. Visually inspect the vessel as specified in paragraph (a)(2) of 40 CFR 60.113b.
  - d. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel

**Equilon Enterprises****PTI Application: 14-05240****Issued****Facility ID: 1431073227**Emissions Unit ID: **T020**

is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of 40 CFR 60.113b and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of 40 CFR 60.113b.

- e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.
2. Compliance with the emission limitations specified in terms A.2.b and A.2.c may be demonstrated by use of the following methods:
    - a. VOC emissions from the storage tanks shall be determined using AP-42, 5th Edition, Chapter 7, Liquid Storage Tanks, September 1997.
    - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
    - c. VOC emissions when loading out distillates (uncontrolled) shall be determined Using AP-42, 5th Edition, Chapter 5.2, January 1995.
    - d. The VOC emissions from the load out of gasoline (controlled) through the loading rack shall be calculated by adding the controlled emissions from the VCU to the fugitive emissions from the loading process. The controlled VOC emissions from the load out off gasoline through the truck loading rack shall be calculated by multiplying the mg/l emission rate determined during the most recent stack test that demonstrated compliance by the throughput of gasoline. A capture efficiency of 98.7 % by weight shall be used for calculating the fugitive VOC emissions from the load out of gasoline through the loading rack.
    - e. Compliance with the HAP emission limitations specified in A.2. may be demonstrated by using the HAP percentages and equations submitted with PTI 14-05240 on November 26, 2001.

**Equilon Enterprises**  
**PTI Application: 14-05240**  
**Issued**

**Facility ID: 1431073227**

Emissions Unit ID: **T020**

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, the Hamilton County Division of Environmental Services and the Equilon Pipeline Company.

3. Compliance with term B.1 shall be demonstrated by the record keeping in term C.2.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.