



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: PERMIT TO INSTALL *CORRECTED COPY 10/23/2001***
LUCAS COUNTY
Application No:04-01267**

DATE: 10/23/2001

BP Products North America Inc
Dennis Durnwald
696
Toledo, OH 436970696

Attached please find a corrected copy of PTI 04-01267 issued **10/16/01**. This corrected copy is being sent due to administrative processing errors and does not affect the enforceability or effective date of the Director's final action. Please note, the appearance of the corrected document may have changed due to changing software or printers (e.g., total number of pages, margins, etc.). Areas of the permit that have been substantively affected by the correction(s) are highlighted in the enclosed "Corrected Copy". I urge you to review these areas in relation to the issued permit document. Please replace the copy provided to you on **10/16/01** with the attached corrected Permit To Install document. *Please note:* No payment is required for processing this corrected copy.

Very truly yours,

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

OCT 30 2001

City of Toledo
Environmental Services

cc: USEPA TDES



State of Ohio Environmental Protection Agency

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**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY
Application No: 04-01267**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
CC	MACT
Kb	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 10/16/2001

BP Products North America Inc
Dennis Durnwald
P.O. Box 696
Toledo, OH 43697-0696

*****CORRECTED COPY 10/23/2001*****

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
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

TDES



Permit To Install
Terms and Conditions

Issue Date: 10/16/2001
Effective Date: 10/16/2001

FINAL PERMIT TO INSTALL 04-01267
*****CORRECTED COPY 10/23/2001*****

Application Number: 04-01267
APS Premise Number: 0448020007
Permit Fee: \$3250
Name of Facility: BP Products North America Inc
Person to Contact: Dennis Durnwald
Address: P.O. Box 696
Toledo, OH 43697-0696

Location of proposed air contaminant source(s) [emissions unit(s)]:
4001 Cedar Point Road
Oregon, Ohio

Description of proposed emissions unit(s):
Modification to revise emission limits on existing storage tanks to reflect slotted guidepole controls.

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. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition

depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the

emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

11. 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.

B. State Only Enforceable 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 of state-only enforceable 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 state-only required 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. 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.

4. 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.

5. 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.

6. 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 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.

7. 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.

8. 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).

9. 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.

10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. 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	13.8

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T163 (Tank 648) - 110,000 bbl external floating roof storage tank	OAC rule 3745-21-09(Z)	See 2.a
	OAC rule 3745-31-05(A)(3)	2.7 tons/yr VOC and See 2.b
	40 CFR 60 Subpart Kb	See 2.c
	40 CFR 63 Subpart CC	See 2.d

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60 Subpart Kb.

2.b The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart Kb.

2.c The permittee shall equip the storage vessel with an external floating roof meeting the following specifications:

i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4).

ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

2.d Storage vessels also subject to the provisions of 40 CFR 60 subpart Kb are required to comply only with the requirements of 40 CFR 60 Subpart Kb, except as provided by 2.d.i through 2.d.vi.

i. Storage vessels that are to comply with 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.

ii. If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113(b) of subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 63.120(b)(7)(i) or 63.120(b)(7)(ii) of subpart G.

iii. If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services.

- iv. If an extension is utilized in accordance with paragraph iii. of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.
- v. Permittees of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.
- vi. The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
 - a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - c. If this emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of 40 CFR 60.113b (1.a and 1.b above).
2. The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

- c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b (paragraph 1 above) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services. Documentation of a decision to utilize an extension shall include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
5. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
 - a. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with volatile organic liquid (VOL).
6. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
7. If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses imminent danger to inspecting personnel, the permittee shall comply with the requirements in 7.a or 7.b.
 - a. The permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or
 - b. The permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

8. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the emissions unit.
9. Except as provided in paragraphs (f) of 40 CFR 60.116b, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
10. The permittee shall maintain records of the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. For all the inspections required by paragraph (b)(6) of 40 CFR 60.113b, the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Toledo Division of Environmental Services the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of 40 CFR 60.113b is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services at least 7 days prior to the refilling.
2. The permittee shall notify the Toledo Division of Environmental Services 30 days in advance of any gap measurements required by paragraph (b)(1) of 40 CFR 60.113b to afford the Toledo Division of Environmental Services the opportunity to have an observer present.
3. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), the permittee shall furnish the Toledo Division of Environmental Services with a report that contains:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
 - d. This report is not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.115b(b)(4).
4. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to the Toledo Division of Environmental Services within 30 days of the inspection, or submit the inspection report as part of the periodic report required under 40 CFR 63 subpart CC. The report will identify the vessel and contain the

information specified in paragraph (b)(2) of 40 CFR 60.115b and the date the vessel was emptied or the repairs made and date of repair.

V. Testing Requirements

1. Compliance with the emission limitations of this permit to install shall be determined in accordance with the following methods (where compliance is required to be determined by calculation, the data to be used in the calculation is the data required to be collected by the terms of this permit):

- a. Emission Limitation

2.7 tons/yr VOC

- a. Applicable Compliance Method

Compliance with the emission limitation of 2.7 tons/yr VOC shall be determined in accordance with AP-42 chapter 7 dated September, 1997, or the latest version of TANKS computer software from EPA and the records required by A.III.9 and 10.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Toledo Division of Environmental Services specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

- c. For other liquids, the vapor pressure:
 - i. May be obtained from standard reference texts, or
 - ii. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - iii. Measured by an appropriate method approved by the Administrator; or
 - iv. Calculated by an appropriate method approved by the Administrator.
2. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
 - a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of 40 CFR 60.116b.
 - b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - i. ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - ii. ASTM D323-82 or 94 (incorporated by reference—see 40 CFR 60.17); or
 - iii. As measured by an appropriate method as approved by the Administrator.
3. These terms and conditions supersede the requirements for T163 contained in PTI 04-708.

B. State Only Enforceable Section

I. 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>
T163 (Tank 648) - 110,000 bbl external floating roof tank		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
T166 (Tank 14) - 16,883.35 bbl external floating roof storage tank	OAC rule 3745-21-09(Z)	See 2.a
	OAC rule 3745-31-05(A)(3)	3.9 tons/yr VOC and see 2.b
	40 CFR 60 Subpart Kb	See 2.c
	40 CFR 63 Subpart CC	See 2.d

2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60 Subpart Kb.
- 2.b The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart Kb.
- 2.c The permittee shall equip the storage vessel with an external floating roof meeting the following specifications:
 - i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

- (b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4).
 - ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
 - iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.
- 2.d** Storage vessels also subject to the provisions of 40 CFR 60 subpart Kb are required to comply only with the requirements of 40 CFR 60 Subpart Kb, except as provided by 2.d.i through 2.d.vi.
- i. Storage vessels that are to comply with 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
 - ii. If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113(b) of subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 63.120(b)(7)(i) or 63.120(b)(7)(ii) of subpart G.
 - iii. If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113b(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional

calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services.

- iv. If an extension is utilized in accordance with paragraph iii. of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.
- v. Permittees of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.
- vi. The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
 - a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - c. If this emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of 40 CFR 60.113b (1.a and 1.b above).
2. The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:

- a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - c. The total surface area of each gap described in paragraph (b)(2)(ii) of 40 CFR 60.113b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
3. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of 40 CFR 60.113b (paragraph 4 below).
4. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4)(i) and (ii) of 40 CFR 60.113b (4.a and 4.b below).
- a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - b. The secondary seal is to meet the following requirements:
 - i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of 40 CFR 60.113b.
 - ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. As specified under 40 CFR 63.654(n)(8)(i), the permittee is exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.

- iii. There are to be no holes, tears, or other openings in the seal or seal fabric.
 - c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b (paragraph 1 above) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services. Documentation of a decision to utilize an extension shall include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
5. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
- a. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with volatile organic liquid (VOL).
6. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
- a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
7. If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses imminent danger to inspecting personnel, the permittee shall comply with the requirements in 7.a or 7.b.
- a. The permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or
 - b. The permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

8. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the emissions unit.
9. Except as provided in paragraphs (f) of 40 CFR 60.116b, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
10. The permittee shall maintain records of the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. For all the inspections required by paragraph (b)(6) of 40 CFR 60.113b, the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Toledo Division of Environmental Services the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of 40 CFR 60.113b is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services at least 7 days prior to the refilling.
2. The permittee shall notify the Toledo Division of Environmental Services 30 days in advance of any gap measurements required by paragraph (b)(1) of 40 CFR 60.113b to afford the Toledo Division of Environmental Services the opportunity to have an observer present.
3. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), the permittee shall furnish the Toledo Division of Environmental Services with a report that contains:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
 - d. This report is not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.115b(b)(4).
4. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to the Toledo Division of Environmental Services within 30 days of the inspection, or submit the inspection report as part of the periodic report required under 40 CFR 63 subpart CC. The report will identify the vessel and contain the

information specified in paragraph (b)(2) of 40 CFR 60.115b and the date the vessel was emptied or the repairs made and date of repair.

V. Testing Requirements

1. Compliance with the emission limitations of this permit to install shall be determined in accordance with the following methods (where compliance is required to be determined by calculation, the data to be used in the calculation is the data required to be collected by the terms of this permit):

- a. Emission Limitation

3.9 tons/yr VOC

- a. Applicable Compliance Method

Compliance with the emission limitation of 3.9 tons/yr VOC shall be determined in accordance with AP-42 chapter 7 dated September, 1997, or the latest version of TANKS computer software from EPA and the records required by A.III.9 and 10.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
2. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Toledo Division of Environmental Services specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - a. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

- b. For other liquids, the vapor pressure:
 - c. May be obtained from standard reference texts, or
 - d. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - e. Measured by an appropriate method approved by the Administrator; or
 - f. Calculated by an appropriate method approved by the Administrator.
2. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
- a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of 40 CFR 60.116b.
 - b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - i. ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - ii. ASTM D323-82 or 94 (incorporated by reference—see 40 CFR 60.17); or
 - iii. As measured by an appropriate method as approved by the Administrator.
3. These terms and conditions supersede the requirements for T166 contained in PTI 04-770 as issued October 28, 1992.

B. State Only Enforceable Section

I. 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>
T166 (Tank 14) - 16,883.35 bbl external floating roof storage tank		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
T167 (Tank 15) - 16,866.73 bbl external floating roof storage tank	OAC rule 3745-21-09(Z)	See 2.a
	OAC rule 3745-31-05(A)(3)	3.9 tons/yr VOC and see 2.b
	40 CFR 60 Subpart Kb	See 2.c
	40 CFR 63 Subpart CC	See 2.d

2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60 Subpart Kb.
- 2.b The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart Kb.
- 2.c The permittee shall equip the storage vessel with an external floating roof meeting the following specifications:
 - i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4).

- ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
- iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

2.d Storage vessels also subject to the provisions of 40 CFR 60 subpart Kb are required to comply only with the requirements of 40 CFR 60 Subpart Kb, except as provided by 2.d.i through 2.d.vi.

- i. Storage vessels that are to comply with 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
- ii. If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113(b) of subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 63.120(b)(7)(i) or 63.120(b)(7)(ii) of subpart G.
- iii. If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services.
- iv. If an extension is utilized in accordance with paragraph iii. of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

- v. Permittees of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.
- vi. The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
 - a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - c. If this emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of 40 CFR 60.113b (1.a and 1.b above).
2. The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - c. The total surface area of each gap described in paragraph (b)(2)(ii) of 40 CFR 60.113b shall be determined by using probes of various widths to measure accurately the actual distance

from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

3. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of 40 CFR 60.113b (paragraph 4 below).
4. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4)(i) and (ii) of 40 CFR 60.113b (4.a and 4.b below).
 - a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - b. The secondary seal is to meet the following requirements:
 - i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of 40 CFR 60.113b.
 - ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. As specified under 40 CFR 63.654(n)(8)(i), the permittee is exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
 - iii. There are to be no holes, tears, or other openings in the seal or seal fabric.
 - c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b (paragraph 1 above) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services. Documentation of a decision to utilize an extension shall include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

5. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
 - a. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with volatile organic liquid (VOL).
6. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
7. If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses imminent danger to inspecting personnel, the permittee shall comply with the requirements in 7.a or 7.b.
 - a. The permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or
 - b. The permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.
8. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the emissions unit.
9. Except as provided in paragraphs (f) of 40 CFR 60.116b, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

10. The permittee shall maintain records of the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. For all the inspections required by paragraph (b)(6) of 40 CFR 60.113b, the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Toledo Division of Environmental Services the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of 40 CFR 60.113b is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services at least 7 days prior to the refilling.
2. The permittee shall notify the Toledo Division of Environmental Services 30 days in advance of any gap measurements required by paragraph (b)(1) of 40 CFR 60.113b to afford the Toledo Division of Environmental Services the opportunity to have an observer present.
3. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), the permittee shall furnish the Toledo Division of Environmental Services with a report that contains:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
 - d. This report is not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.115b(b)(4).
4. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to the Toledo Division of Environmental Services within 30 days of the inspection, or submit the inspection report as part of the periodic report required under 40 CFR 63 subpart CC. The report will identify the vessel and contain the information specified in paragraph (b)(2) of 40 CFR 60.115b and the date the vessel was emptied or the repairs made and date of repair.

V. Testing Requirements

1. Compliance with the emission limitations of this permit to install shall be determined in accordance with the following methods (where compliance is required to be determined by calculation, the data to be used in the calculation is the data required to be collected by the terms of this permit):

a. Emission Limitation

3.9 tons/yr VOC

Applicable Compliance Method

Compliance with the emission limitation of 3.9 tons/yr VOC shall be determined in accordance with AP-42 chapter 7 dated September, 1997, or the latest version of TANKS computer software from EPA and the records required by A.III.9 and 10.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Toledo Division of Environmental Services specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
 - c. For other liquids, the vapor pressure:
 - i. May be obtained from standard reference texts, or
 - ii. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - iii. Measured by an appropriate method approved by the Administrator; or

- iv. Calculated by an appropriate method approved by the Administrator.
2. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
- a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of 40 CFR 60.116b.
 - b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - i. ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - ii. ASTM D323-82 or 94 (incorporated by reference—see 40 CFR 60.17); or
 - iii. As measured by an appropriate method as approved by the Administrator.
3. These terms and conditions supersede the requirements for T167 contained in PTI 04-770 as issued October 28, 1992.

B. State Only Enforceable Section

I. 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>
T167 (Tank 15) - 16,866.73 bbl external floating roof tank		

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. 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>
T168 (Tank 26) - 190,476.19 bbl external floating roof storage tank	OAC rule 3745-21-09(Z)	See 2.a
	OAC rule 3745-31-05(A)(3)	1.6 tons/yr VOC and see 2.b
	40 CFR 60 Subpart Kb	See 2.c
	40 CFR 63 Subpart CC	See 2.d

2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60 Subpart Kb.
- 2.b The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart Kb.
- 2.c The permittee shall equip the storage vessel with an external floating roof meeting the following specifications:
 - i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4).

- ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
- iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

2.d Storage vessels also subject to the provisions of 40 CFR 60 subpart Kb are required to comply only with the requirements of 40 CFR 60 Subpart Kb, except as provided by 2.d.i through 2.d.vi.

- i. Storage vessels that are to comply with 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
- ii. If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113(b) of subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 63.120(b)(7)(i) or 63.120(b)(7)(ii) of subpart G.
- iii. If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services.
- iv. If an extension is utilized in accordance with paragraph iii. of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

- v. Permittees of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.
- vi. The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
 - a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - c. If this emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of 40 CFR 60.113b (1.a and 1.b above).
2. The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - c. The total surface area of each gap described in paragraph (b)(2)(ii) of 40 CFR 60.113b shall be determined by using probes of various widths to measure accurately the actual distance

from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

3. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of 40 CFR 60.113b (paragraph 4 below).
4. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4)(i) and (ii) of 40 CFR 60.113b (4.a and 4.b below).
 - a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - b. The secondary seal is to meet the following requirements:
 - i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of 40 CFR 60.113b.
 - ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. As specified under 40 CFR 63.654(n)(8)(i), the permittee is exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
 - iii. There are to be no holes, tears, or other openings in the seal or seal fabric.
 - c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b (paragraph 1 above) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services. Documentation of a decision to utilize an extension shall include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

5. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
 - a. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with volatile organic liquid (VOL).
6. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
7. If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses imminent danger to inspecting personnel, the permittee shall comply with the requirements in 7.a or 7.b.
 - a. The permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or
 - b. The permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.
8. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the emissions unit.
9. Except as provided in paragraphs (f) of 40 CFR 60.116b, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
10. The permittee shall maintain records of the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. For all the inspections required by paragraph (b)(6) of 40 CFR 60.113b, the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Toledo Division of Environmental Services the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of 40 CFR 60.113b is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services at least 7 days prior to the refilling.
2. The permittee shall notify the Toledo Division of Environmental Services 30 days in advance of any gap measurements required by paragraph (b)(1) of 40 CFR 60.113b to afford the Toledo Division of Environmental Services the opportunity to have an observer present.
3. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), the permittee shall furnish the Toledo Division of Environmental Services with a report that contains:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
 - d. This report is not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.115b(b)(4).
4. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to the Toledo Division of Environmental Services within 30 days of the inspection, or submit the inspection report as part of the periodic report required under 40 CFR 63 subpart CC. The report will identify the vessel and contain the information specified in paragraph (b)(2) of 40 CFR 60.115b and the date the vessel was emptied or the repairs made and date of repair.

V. Testing Requirements

1. Compliance with the emission limitations of this permit to install shall be determined in accordance with the following methods (where compliance is required to be determined by calculation, the data to be used in the calculation is the data required to be collected by the terms of this permit):

a. Emission Limitation

1.6 tons/yr VOC

Applicable Compliance Method

Compliance with the emission limitation of 1.6 tons/yr VOC shall be determined in accordance with AP-42 chapter 7 dated September, 1997, or the latest version of TANKS computer software from EPA and the records required by A.IV.10.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Toledo Division of Environmental Services specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
 - c. For other liquids, the vapor pressure:
 - i. May be obtained from standard reference texts, or
 - ii. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or

- iii. Measured by an appropriate method approved by the Administrator; or
 - iv. Calculated by an appropriate method approved by the Administrator.
2. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
- a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of 40 CFR 60.116b.
 - b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - i. ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
 - ii. ASTM D323-82 or 94 (incorporated by reference—see 40 CFR 60.17); or
 - iii. As measured by an appropriate method as approved by the Administrator.
3. These terms and conditions supersede the requirements for T168 contained in PTI 04-791 as issued December 16, 1992.

B. State Only Enforceable Section

I. 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>
T168 (Tank 26) - 190,476.19 bbl external floating roof tank		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
T169 (Tank 27) - 190,476.19 bbl external floating roof storage tank	OAC rule 3745-21-09(Z)	See 2.a
	OAC rule 3745-31-05(A)(3)	1.7 tons/yr VOC and see 2.b
	40 CFR 60 Subpart Kb	See 2.c
	40 CFR 63 Subpart CC	See 2.d

2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60 Subpart Kb.
- 2.b The requirements of this rule also include compliance with the requirements of 40 CFR 60 subpart Kb.
- 2.c The permittee shall equip the storage vessel with an external floating roof meeting the following specifications:
 - i. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (a) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (b) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4).

- ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
 - iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.
- d. Storage vessels also subject to the provisions of 40 CFR 60 subpart Kb are required to comply only with the requirements of 40 CFR 60 Subpart Kb, except as provided by 2.d.i through 2.d.vi.
- i. Storage vessels that are to comply with 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
 - ii. If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113(b) of subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 63.120(b)(7)(i) or 63.120(b)(7)(ii) of subpart G.
 - iii. If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services.
 - iv. If an extension is utilized in accordance with paragraph iii. of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

- v. Permittees of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.
- vi. The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency:
 - a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
 - b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - c. If this emissions unit ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of 40 CFR 60.113b (1.a and 1.b above).
2. The permittee shall determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - c. The total surface area of each gap described in paragraph (b)(2)(ii) of 40 CFR 60.113b shall be determined by using probes of various widths to measure accurately the actual distance

from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

3. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of 40 CFR 60.113b (paragraph 4 below).
4. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4)(i) and (ii) of 40 CFR 60.113b (4.a and 4.b below).
 - a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - b. The secondary seal is to meet the following requirements:
 - i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of 40 CFR 60.113b.
 - ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. As specified under 40 CFR 63.654(n)(8)(i), the permittee is exempt from the secondary seal requirements of 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by CFR 60.113b(b) of subpart Kb.
 - iii. There are to be no holes, tears, or other openings in the seal or seal fabric.
 - c. If a failure that is detected during inspections required in paragraph (b)(1) of 40 CFR 60.113b (paragraph 1 above) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Toledo Division of Environmental Services. Documentation of a decision to utilize an extension shall include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

5. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
 - a. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with volatile organic liquid (VOL).
6. The permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
7. If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses imminent danger to inspecting personnel, the permittee shall comply with the requirements in 7.a or 7.b.
 - a. The permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or
 - b. The permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.
8. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the emissions unit.
9. Except as provided in paragraphs (f) of 40 CFR 60.116b, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
10. The permittee shall maintain records of the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. For all the inspections required by paragraph (b)(6) of 40 CFR 60.113b, the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Toledo Division of Environmental Services the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of 40 CFR 60.113b is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services at least 7 days prior to the refilling.
2. The permittee shall notify the Toledo Division of Environmental Services 30 days in advance of any gap measurements required by paragraph (b)(1) of 40 CFR 60.113b to afford the Toledo Division of Environmental Services the opportunity to have an observer present.
3. Within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1), the permittee shall furnish the Toledo Division of Environmental Services with a report that contains:
 - a. The date of measurement.
 - b. The raw data obtained in the measurement.
 - c. The calculations described in 40 CFR 60.113b (b)(2) and (b)(3).
 - d. This report is not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.115b(b)(4).
4. After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4), the permittee shall submit a report to the Toledo Division of Environmental Services within 30 days of the inspection, or submit the inspection report as part of the periodic report required under 40 CFR 63 subpart CC. The report will identify the vessel and contain the information specified in paragraph (b)(2) of 40 CFR 60.115b and the date the vessel was emptied or the repairs made and date of repair.

V. Testing Requirements

1. Compliance with the emission limitations of this permit to install shall be determined in accordance with the following methods (where compliance is required to be determined by calculation, the data to be used in the calculation is the data required to be collected by the terms of this permit):

a. Emission Limitation

1.7 tons/yr VOC

Applicable Compliance Method

Compliance with the emission limitation of 1.7 tons/yr VOC shall be determined in accordance with AP-42 chapter 7 dated September, 1997, or the latest version of TANKS computer software from EPA and the records required by A.III.9 and 10.

VI. Miscellaneous Requirements

1. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR 60.17), unless the Toledo Division of Environmental Services specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
 - c. For other liquids, the vapor pressure:
 - i. May be obtained from standard reference texts, or
 - ii. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or

B. State Only Enforceable Section

I. 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>
T169 (Tank 27) - 190,476.19 bbl external floating roof tank		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None