

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for **BP Oil Co., Toledo Refinery** located in **Lucas** County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source No.</u>	<u>Source Identification/Description</u>	<u>BAT Determination</u>	<u>Applicable Federal and OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control & Usage Requirements</u>
T178	Tank 258 / 2,185 BBL fixed roof petroleum liquid storage tank	Use of controls meeting NSPS Kb	3745-21-09(L) 3745-31-05	2.63 tons VOC/yr This rule is less stringent than NSPS subpart Kb.
			NSPS Subpart Kb	

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	2.63

A. Additional Terms and Conditions

1. The permittee shall install controls meeting the requirements of 40 CFR 60.112b, NSPS Subpart K_b.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
3. 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 Administrator 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 Method D2879-83 (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.
- 4. All records required under D, Reporting Requirements, shall be maintained for at least 2 years, except the record required by D(1) which will be kept for the life of the control equipment.

D. Reporting Requirements

After installing the NSPS required control equipment, the owner or operator shall meet the following requirements:

1. Furnish the Toledo Division of Environmental Services with a report that describes the control equipment and certifies that the control equipment meets the requirements listed under the *Standards for volatile organic compounds (VOC), NSPS K_b (40 CFR 60.112b) and Testing and procedures, NSPS K_b (40 CFR 60.113b)*. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
2. Keep a record of each inspection performed as required by the *Testing and procedures, NSPS Subpart K_b (40 CFR 60.113b)*. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
3. If any of the conditions described in Additional Special Term and Condition E, Testing Requirements, are detected during the annual visual inspection required by Additional Special Term and Condition E, Testing Requirements, a report shall be furnished to the Administrator within 30

days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by Additional Special Term and Condition E, Testing Requirements, that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects, shall furnish a report to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of *Standard for volatile organic compounds (VOC), NSPS Kb (40 CFR 60.112b) or the Testing and procedures, NSPS Subpart kb (40 CFR 60.113b)* and list each repair made.

E. Testing Requirements

1. The permittee shall comply with the *Tests and Procedures* of NSPS Kb, (40 CFR 60.113b).
2. Compliance with the emission limitations in the *Air Emission Summary* of this permit to install shall be determined in accordance with the following methods:

Emission Limitation: 2.63 tons VOC/year

Applicable Compliance Method: Emission calculations using Tanks V3.0 using the actual annual throughput and annual average vapor pressure.

F. Miscellaneous Requirements

None