SPECIAL CONDITIONS

Permit No. 6176B

1. Piping, Valves, Flanges, Pumps, and Compressors in Volatile Organic Compounds (VOC) Service - Intensive Directed Maintenance

   Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment.

   A. These conditions shall not apply (1) where the VOC have an aggregate partial pressure or vapor pressure of less than 0.044 psia at 68°F or (2) to piping and valves two inches nominal size and smaller, or (3) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.

   B. Construction of new and reworked piping, valves, and pump and compressor systems shall conform to applicable ANSI, API, ASME, or equivalent codes.

   C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

   D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined by Regulation V, shall be identified in a list to be made available upon request.

   E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

      Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For

valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

An approved gas analyzer shall conform to requirements listed in Title 40 Code of Federal Regulations Part 60.485(a)-(b) (40 CFR 60.485[a]-[b]).

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

G. All new and replacement pumps and compressors shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

H. Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping liquids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The Texas Natural Resource Conservation Commission (TNRCC) Executive Director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

I. The results of the required fugitive monitoring and maintenance program shall be made available to the TNRCC Executive Director or his designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, and corrective actions taken.

Records of flange inspections are not required unless a leak is detected.

J. Compliance with the requirements of this condition does not assure compliance with requirements of TNRCC Regulation V, an applicable New Source Performance Standard, or an applicable National Emission Standard for Hazardous Air Pollutants and does not constitute approval of alternative standards for these regulations.

2. Operation, monitoring, recording, and testing of the facility shall comply with applicable Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources promulgated for Storage Vessels for Petroleum Liquids in 40 CFR 60, Subparts A and K.

3. Storage and Loading of VOC

A. These provisions shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.5 psia at the maximum expected operating temperature or (2) to storage tanks smaller than 25,000 gallons.

B. An internal floating roof or equivalent control shall be installed on all tanks.

C. An open-top tank containing a floating roof which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal, and the secondary seal is rim-mounted. A weathershield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.

D. For any tank equipped with a floating roof, the integrity of the floating roof seals shall be verified annually and records maintained to describe dates, seal integrity, and corrective actions taken.

E. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650, Appendix C, or an equivalent degree of flotation, except that an internal floating cover need not be designed to meet rainfall support requirements.

F. Uninsulated tank exterior surfaces exposed to the sun shall be white.

G. For purposes of assuring compliance with VOC emission limitations, the holder of this permit shall maintain a monthly emissions record which describes calculated emissions of VOC from all storage tanks and loading operations.

The record shall include tank or loading point identification number, control method used, tank or vessel capacity in gallons, name of the material stored or loaded, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date in gallons, and total tons of emissions including controls for the previous month and year-to-date. This record shall be maintained at the plant site for at least two years and be made available to representatives of the TNRCC upon request.

H. Emissions for tanks and loading operations shall be calculated using: (a) the October, 1992 edition of AP-42, "Compilation of Air Pollutant Emission Factors," for annual emissions from fixed-roof tanks with internal floating covers; and (b) the TNRCC memo dated June 14, 1993 entitled "Annual and Short Term Emissions from Storage Tanks" for short-term emission rates from fixed-roof tanks with internal floating covers or for open-top tanks with external floating roofs.

I. Controlled and uncontrolled emissions of VOC shall be calculated for storage tanks using the following meteorological data as monthly average values:

	Monthly Average
Daily temperature change, °F	9.50
Wind speed, mph	11.00
Station pressure, psia	14.70

4. Emissions from the sources in the emission limitation table may exceed the stated values provided the emissions result directly from the initial fill of the facility.

5. This permit has been issued based on the premise that during normal operation, the facility will be used for standby storage with no cavern filling or withdrawal operations other than those required as part of routine maintenance procedures and operational readiness testing. Operational readiness testing will be done with non-gassy crude oil. The holder of this permit is responsible for notifying the TNRCC Executive Director in writing prior to starting any filling or withdrawal operation. Emissions from emergency filling or withdrawal operations pursuant to an order from the President of the United States are not required to meet the emission limitations contained in this permit; however, the TNRCC Executive Director may require a new permit for the facility if it is found that frequent withdrawal of this emergency oil reserve is occurring.

Dated _____