SPECIAL CONDITIONS

Permit Number 7195A

1. <u>PIPING, VALVES, FLANGES, PUMPS, AND COMPRESSORS IN VOLATILE ORGANIC COMPOUNDS (VOC) SERVICE</u>

- A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.5 psia at 100°F or at maximum process operating temperature if less than 100°F, (2) to piping and valves two inches nominal size and smaller, or (3) where the operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure.
- B. Construction of new and reworked piping, valves, 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 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 period 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.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, 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.

G. Except as may be provided for in the special conditions of this permit, all pump and compressor seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. Seal systems that prevent emissions may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure or seals degassing to vent control systems kept in good working order.

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.

- H. Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 10,000 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 that cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The Texas Commission on Environmental Quality (TCEQ) Executive Director, at 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 TCEQ Executive Director or 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. Fugitive emission monitoring required by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), an applicable New Source Performance Standards (NSPS), Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) (40 CFR Part 61) may be used in lieu of Items F through I of this condition.
- K. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, NSPS, or NESHAPS and does not constitute approval of alternative standards for these regulations.

2. STORAGE AND LOADING OF VOC

- A. These conditions 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 that uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof-tank provided the primary seal has either a mechanical shoe seal or a liquid-mounted seal and the secondary seal is rim-mounted.
 - A weather shield 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 that includes 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 TCEQ upon request.
- H. If throughput records are specified in the special conditions of this permit, the holder of this permit may keep such records in lieu of the records required in paragraph G. (12/02)

- I. Emissions for tanks and loading operations shall be calculated using the edition of AP-42, "Compilation of Air Pollutant Emission Factors," in effect on the date this permit was issued (or the edition in effect on the last date the permit was amended if the permit has been amended).
- J. Controlled and uncontrolled emissions of VOC shall be calculated for storage tanks using the following meteorological data as monthly average values:

Monthly Average

Average annual temperature, °F 73.8 Wind speed, mph 11.6 Station pressure, psia 14.7

EMISSIONS STANDARDS

- 3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in 40 CFR Part 60, Subparts A and K on Standards of Performance for New Stationary Sources promulgated for Storage Vessels for Petroleum Liquids, for Storage Tank Nos. 1 through 9; Subparts A and Ka for Storage Tank Nos. 10 and 11; and Subparts A and Kb for Storage Tank No. 12.
- 4. These facilities shall comply with all applicable requirements of the EPA regulations in 40 CFR Part 60, Subparts A and XX on Standards of Performance for New Stationary Sources promulgated for Bulk Gasoline Terminals.
- 5. The holder of this permit shall reduce the temperature and/or vapor pressure of the stored material as needed to maintain a vapor pressure of less than 11.1 psia at actual storage conditions.
- 6. The benzene content of gasoline processed in this facility may not exceed 1.0 percent by weight for gasoline to be sold in the United States. Gasoline to be exported to Mexico may neither exceed 4.9 percent benzene by weight, nor a Reid Vapor Pressure of 9.5 psi. The gasoline Reid Vapor Pressure for a product to be used in the United States shall not exceed 9.0 psi (7.8 psi if to be dispensed in an ozone nonattainment county) (Summer: May 1 through September 15) or 13.5 psi (Winter: September 16 through April 30). All gasoline grades shall be analyzed at least once in both the summer and winter periods for benzene content and Reid Vapor Pressure. Method 18 (40 CFR Part 60, Appendix A) or another

TCEQ-approved method shall be used when sampling for benzene content. American Society for Testing and Materials Test Methods procedures D323-82, D4953-91, D5190-91, or D5191-91 may be used to determine Reid Vapor Pressure. Analytic results shall be certified by an approved laboratory. Records of benzene and Reid Vapor Pressure sampling/analysis shall be maintained at the plant site for a period of two years and shall be made available to representatives of the TCEQ.

OPERATIONAL CONDITIONS

- 7. Gasoline truck loading operations shall not exceed eight 9,000 gallon trucks during any one-hour period until the modifications required in Special Condition No. 18 are accomplished and in operational use. Thereafter, gasoline truck loading operations shall not exceed sixteen 9,000-gallon trucks during any one-hour period.
- 8. The total throughput of gasoline loaded from truck Loading Rack 3a and associated storage tanks shall not exceed 5,802,000 barrels (bbl) per year. No other loading rack shall be used for gasoline and/or related high true vapor pressure compounds (greater than 3 psia).
- 9. The holder of this permit shall maintain loading equipment in such a manner that vapor tight connections can be made.
- 10. The holder of this permit shall maintain an approved monitoring and maintenance program to insure compliance with special conditions herein. This program shall include:
 - A. A baseline level for leak-free loading that has been established by use of a VOC detector during the first seven days of operations.
 - B. Monthly inspections for leaks at the loading arm seal and adapter plate gasket. Such inspection shall be performed with a VOC detector.
 - C. An established level at which action must be taken to repair or replace seals and gaskets.
 - D. Frequency of visual inspection of loading equipment, including seals and gaskets.

The results of the required monitoring and maintenance program shall be

made available to the TCEQ Executive Director or representative upon request. Records shall show appropriate dates, test methods, results, and corrective actions taken.

- 11. Each tank truck receiving or delivering gasoline at this facility shall pass vapor-tight testing every 12 months using the methods described in 40 CFR Part 60, Subpart XX. The operator shall not allow a gasoline tank truck to be filled or emptied unless the tank being filled or emptied has passed a leak-tight test within the last 12 months as evidenced by a prominently displayed certification affixed near the Department of Transportation certification plate which:
 - A. Shows the date the gasoline tank truck last passed the leak-tight test required by this condition, and
 - B. Shows the identification number of the gasoline tank truck.

DESIGN CONDITIONS

- 12. Loading emissions of chemicals having a true vapor pressure greater than 0.5 psia at maximum loading temperature must be routed to a flare that achieves at least 98 percent efficiency in the destruction of hydrocarbons.
- 13. Flares shall be designed and operated in accordance with 40 CFR Part 60, Subpart A, § 60.18, including specifications of minimum heating value of the waste gas, maximum tip velocity, and pilot flame monitoring. If necessary to insure adequate combustion, sufficient fuel gas shall be added to make the gases combustible. An infrared monitor is considered equivalent to a thermocouple for flame monitoring purposes.
- 14. The flare must be equipped with a continuously burning pilot or other automatic ignition system that assures gas ignition and provides immediate notification of appropriate personnel when the ignition system ceases to function. The flare shall be designed to burn for five minutes after loading ceases.
- 15. Pilot and supplemental fuel gas fired in the vapor recovery flare system is limited to pipeline-quality sweet natural gas containing no more than 0.25 grain hydrogen sulfide and 5 grains total sulfur per 100 dscf. Use of any other fuel will require

modification to this permit.

- 16. Loading Rack 3a shall be operated with vacuum-assisted vapor collection to the flare.
- 17. The Loading Rack 3a Monitoring System shall:
 - A. Prevent start of loading operations until the vapor collection system is properly connected and the flare is operational;
 - B. Automatically shut down loading operations if the vacuum vapor collection system or flare malfunctions, or if a reportable upset condition exists;
 - C. Prevent resumption of loading until the identified malfunction or upset condition has been repaired; and
 - D. Include a pressure/vacuum gauge installed on the suction side of the loading rack blower system to verify a vacuum exists before loading starts or resumes.
- 18. The Loading Rack 3a Monitoring System shall be modified so that it automatically shuts down loading operations and prevents further loading whenever the pressure/vacuum gauge shows a vacuum of less than 1.5 inches of water below atmospheric pressure.

MARINE DOCK 2 (NAPHTHA LOADING)

- 19. Naphtha barge loading operations at Dock No. 2 shall not exceed an annual throughput of 51,000 bbl per year. The loading rate (short term pumping rate) of naphtha into the barge shall not exceed 210 barrels per hour. Only one barge may be loaded at any one time. Records indicating the time of barge loading, total throughput, and loading (pumping) rate at time of loading shall be maintained on site for a period of two years and made available to representatives of the TCEQ upon request.
- 20. The benzene concentration of the naphtha handled at barge dock No. 2 shall not exceed 4.45 percent (wt). The true vapor pressure of naphtha product being loaded into the barge shall not exceed 6.8 psia at 95°F. Any naphtha handled after the initial 51,000 barrels loadout shall be tested for benzene concentration prior to being loaded into a barge.
- 21. During naphtha marine loading operations, additional loading operations including,

tank filling and tank truck loading shall be prohibited.

MARINE DOCK 2 (COAL TAR LOADING)

22. Coal tar ship loading operations at Dock No. 2 shall not exceed an annual throughput of 280,000 bbl per year. The loading rate (short term pumping rate) of coal tar into the ship shall not exceed 2,350 barrels per hour. Loading shall be conducted using submerged loading procedures and only one ship may be loaded at any one time. Records indicating the time of ship loading, total throughput, and loading (pumping) rate at the time of loading shall be maintained on site for a period of two years and made available to representatives of the TCEQ upon request.

MARINE DOCK 5

- 23. The facilities shall comply with the requirements of 30 TAC § 113.300, including the referenced requirements contained in 40 CFR Part 63, Subpart Y. **(5/03)**
- 24. A. The loading rate (short term pumping rate) of gasoline or diesel into barges shall not exceed 10,000 barrels per hour.
 - B. The annual throughput of gasoline into barges at Dock No. 5 shall not exceed 45,600,000 barrels per year.
 - C. The annual throughput of diesel into barges at Dock No. 5 shall not exceed 45,600,000 barrels per year.
 - D. Records indicating the time of barge loading, total throughput, and loading (pumping) rate at the time of loading shall be kept. **(5/03)**
- 25. A. Vapor from loading gasoline into barges shall be routed to a vapor combustion unit (VCU).
 - B. Emissions of gasoline from the VCU stack shall not exceed 10 milligrams per liter (0.0834 pound per 1,000 gallons) of gasoline loaded.
 - C. Loading of gasoline shall not occur if the VCU is inoperative. If the VCU malfunctions while loading a barge, loading operations shall cease until the VCU is operational. **(5/03)**
- 26. The benzene content of any grade of gasoline loaded into barges shall comply with Special Condition No. 6. **(5/03)**

27. Piping, Valves, Pumps, and Compressors in Petroleum Service

- A. Audio, olfactory, and visual checks for petroleum product leaks within the operating area shall be made monthly.
- B. Every reasonable effort shall be made to repair or replace a leaking component within 15 days after a leak is found. If the repair or replacement of a leaking component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired or replaced until a scheduled shutdown shall be identified in a list to be made available to representatives of the TCEQ upon request.

Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request. (5/03)

INITIAL DEMONSTRATION OF COMPLIANCE

- 28. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the VCU. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ <u>Sampling Procedures Manual</u> and in accordance with the appropriate or EPA Reference Methods.
 - A. The TCEQ Harlingen Regional Office shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine VCU loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, the TCEQ, or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Harlingen Regional Director or the TCEQ Enforcement Division, Engineering Services Team in Austin shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division in Austin. Test waivers and alternate/equivalent procedure proposals for 40 CFR Part 60 testing which must have the EPA approval shall be submitted to the TCEQ Enforcement Division, Engineering Services Team in Austin.

- B. Air contaminants emitted from the VCU to be tested for include (but are not limited to) gasoline, oxides of nitrogen, carbon monoxide, and particulate matter.
- C. Sampling shall occur within 60 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the TCEQ Harlingen Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires the EPA approval, and requests shall be submitted to the TCEQ Enforcement Division, Engineering Services Team in Austin.
- D. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters shall be determined at the pretest meeting and shall be stated in the sampling report. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- E. Copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ <u>Sampling Procedures Manual</u>. The reports shall be distributed as follows:

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One copy to the TCEQ Harlingen Regional Office.

One copy to the TCEQ Enforcement Division, Engineering Services Team in Austin. (5/03)

Dated <u>May 29, 2003</u>