SPECIAL CONDITIONS

Permit Number 93260

EMISSION STANDARDS

1. This permit authorizes emissions only from those points listed in the attached table entitled AEmission Sources - Maximum Allowable Emission Rates@ and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the special conditions.

FEDERAL APPLICABILITY

2. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency regulations on Standards of Performance for New Stationary Sources promulgated for Storage Vessels for Petroleum Liquids and for Bulk Gasoline Terminals in Title 40 Code of Federal Regulations (40 CFR) Part 60, Subparts A and Kb.

   These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in Title Code of Federal Regulations (40 CFR) Part 63, Subparts A, Y, and R.

STORAGE OF VOC

3. Storage and transfer operations for the facility's storage vessels are limited to the throughput rates as identified in Attachment A (Storage Tank Authorization Summary) and handling of the products appearing on Attachment B (Approved Products List) and Attachment C (Product Synonym List).

4. Storage tanks are subject to the following requirements: The control requirements specified in paragraphs A-D of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95°F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons.

   A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (1) a liquid-mounted seal, (2) two continuous seals mounted one above the other, or (3) a mechanical shoe seal.

B. An open-top tank containing a floating roof (external floating roof tank) 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.

C. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

D. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.

E. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks must be equipped with permanent submerged fill pipes.

F. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12-month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, 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. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions for tanks shall be calculated using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."

5. The benzene content of any grade of gasoline stored at this terminal shall not exceed 10 percent by weight in the liquid. Gasoline shall be analyzed for benzene two times per year. One test shall be during the summer (May 1 – September 15)

and the other test shall be during the winter (November 1 – February 29). The record shall report benzene content for all grades of gasoline. Gasoline analysis (laboratory certificates of analysis) from the delivering refinery or vessel, are acceptable in place of on-site analysis. Records of each test shall be kept for a period of two years.

LOADING

6. This permit authorizes loading of the following materials with true vapor pressures greater than or equal to 0.5 psia. All loading shall be submerged and rolling 12-month rack throughput records shall be updated on a monthly basis for each product loaded.

| | |
|---|---|
| Alkylate | Methanol |
| Condensate | Naphtha |
| Crude Oil | Reformate |
| Cumene | Rafinate |
| Ethyl Tert Butyl Ether (ETBE) | Reformer Feedstock |
| Ethanol | Toluene |
| Gasoline | Toluene/Xylene |
| Gasolines Blendstocks* | Xylene |
| Cat Feed Stock | |

* See Product Synonym List (Attachment C) for a listing of synonyms for these products.

7. Loading rates for products with vapor pressures greater than 0.5 psia shall not exceed the following:

| EPN | barrels/hour (bbl/hr) |
|---|---|
| BD2 | 8,000 |
| SD1 & SD2 | 20,000* |
| VCU (Railcar) | 6,000 |

* The combined loading rate of ship docks 1 and 2 (SD1 and SD2) shall not exceed 20,000 bbls/hr.

The simultaneous loading of barges, ships, or a combination of the two shall not begin until the maximum loading rate for each barge or ship has been calculated to ensure compliance with the maximum hourly emission rate identified in the MEART (EPN MARINECAP). Loading rates shall not exceed those calculated prior to loading. Calculations shall be updated each time ship or barge is added or

removed from loading operations.

8. This permit authorizes loading of the following materials with true vapor pressures less than 0.5 psia.

| | |
|---|---|
| Diesel Fuels* | Residual Fuel Oils* |
| Distillate Fuel Oils | Kerosenes* |
| Jet Fuels* | Distillate Blendstocks |
| Recovered Oil | |

*See Product Synonym List (Attachment C) for a listing of synonyms for these products.

9. Loading rates for products with vapor pressures less than 0.5 psia shall not exceed the following:

| EPN | barrels/hour (bbl/hr) |
|---|---|
| SD1 | 20,000* |
| SD2 | 20,000* |
| BD2 | 8,000 |
| BD3 | 7,500 |
| TC & RAILDIST | 6,000 |

* Maximum combined loading rate of 20,000 bbls/hr when loading at ship docks (EPNs SD1 and SD2) simultaneously.

10. The permit holder shall maintain and update monthly an emissions record which includes calculated emissions of VOC from all barge, ship, and railcar loading operations over the previous rolling 12 month period. The record shall include the loading spot (barge, ship, or railcar), Facility Identification Number (FIN), control method used, quantity loaded in gallons or barrels, name and type of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date. Records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids that are at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled “Technical Guidance Package for Chemical Sources - Loading Operations.”

11. The following requirements apply to railcar loading

    A. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed

from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.

B. Displaced vapors associated with railcar loading of products with a vapor pressure greater than or equal to 0.5 psia shall be routed through a vapor combustion system (EPN VCU). The vapor combustor shall achieve a minimum destruction efficiency of 99 percent control of the waste gas directed to it.

12. The following requirements apply to barge and ship loading:

A. Before loading a marine vessel with a VOC which has a vapor pressure equal to or greater than 0.5 pounds per square inch absolute under actual storage conditions, the owner or operator of the marine terminal shall verify that the marine vessel has passed an annual vapor tightness test as specified in 40 CFR §63.565(c) (September 19, 1995) or 40 CFR §61.304(f) (October 17, 2000).

B. The displaced vapors associated with barge and ship loading of products with a vapor pressure greater than or equal to 0.5 psia shall be routed to one or both of the loading vapor combustors (EPNs: WESTMVCS and EASTMVCS).

C. Marine vessels shall not be loaded unless the vapor collection system is properly connected and the entire collection system is working as designed.

C. The loading rate for materials with vapor pressures greater than or equal to 0.5 psia at any time shall not exceed 10,000 bbl/hr for each of the two loading thermal oxidizers (EPN: WESTMVCS and EASTMVCS) for a total of 20,000 bbls/hr.

D. Loading materials with vapor pressures greater than or equal to 0.5 psia into ships and barges shall not begin until the stack temperature of the loading vapor combustors (EPN: WESTMVCS and EASTMVCS) being utilized has reached a set point of at least 1450EF. The stack temperature shall be controlled at a set point of at least 1450EF during loading, although the instantaneous stack temperature may fluctuate above and below the set point. Loading shall be discontinued if the stack temperature falls below 1400EF.

E. The following additional barge and ship loading records shall be kept:

i. The type of loading (barge or ship), loading start and end time, loading rates, true vapor pressures, and bulk loading temperatures loaded to ships and barges.

ii. Records required by special condition 12.F.i shall be updated and maintained any time loading rates are changed due to loading barges and ships simultaneously per special condition 7 or when simultaneous loading ceases to occur. Additional records shall include calculations used to determine loading rates prior to start of simultaneous loading as specified in Special Condition 7.

iii. The vapor combustor stack temperatures (EPNs: WESTMVCS & EASTMVCS) during loading of materials with vapor pressures greater than or equal to 0.5 psia

iv. The monthly emission calculations showing compliance with the maximum annual allowable emission rates for the Marine Loading Vapor Combustor System (EPN WESTMVCS & EASTMVCS). and ship and barge docks (EPNs: SD1, SD2, BD2, and BD3)

13. Emissions associated with the transfer between storage tanks authorized in this permit (new tanks) and other storage tanks at this site in service prior to the start of operation of the last tank authorized by this permit (existing tanks) is limited, such that the annual emissions from associated activities do not exceed 1 ton in any rolling 12 month period. These emissions shall be determined as follows:

A. If liquid is transferred from a new tank to an existing tank, the emissions due to filling the existing tank shall be quantified.

B. For transfer of liquid from an existing tank to a new tank, the emissions shall be determined by estimating the emissions associated with filling the existing tank with the quantity of liquid transferred.

C. Tank emissions shall be determined and documented in accordance with Special Condition Nos. 4 and 15, as applicable. The permit holder shall maintain an emissions record which includes calculated emissions of VOC during the previous calendar month and the past consecutive 12-month period.

UTILIZATION OF PERMITS BY RULE

14. Permits by rule shall not be used at the permitted facility for the authorization of additional tank roof landing emissions from the tanks authorized in this permit, or additional storage and loading activity or capacity at the permitted facility. Provided all other requirements of 30 TAC Chapter 106 are satisfied, and provided all other conditions of this permit governing emission controls, monitoring, recordkeeping, and capacity of throughput, loading and storage are also satisfied, these restrictions do not apply to the following circumstances:

    A. Construction of new storage tanks or loading facilities, or additional throughput at existing storage tanks or loading facilities, in service only for compounds with vapor pressures less than 0.5 psia.

    B. Construction of new storage tanks, or additional throughput at existing storage tanks, from which all emissions during the tank roof “off-float” period (i.e., roof landed to roof refloated) are routed to a vapor recovery and abatement system that provides a DRE of at least 99 wt.%.

    C. Construction of new loading facilities, or additional throughput at existing loading facilities, routed to a vapor recovery and abatement system that provides a DRE of at least 99 wt.%.

    D. Activities unrelated to, and that do not otherwise affect emissions from, storage tank and loading operations.

TANK ROOF LANDING OPERATIONS

15. The number of tank roof landings at the permitted facility is limited such that total emissions attributable to tank operations (standing idle emissions after landing, re-filling emissions after landings, de-gassing emissions, routine withdrawal emissions, and routine storage emissions) comply with applicable emission rate limits specified in Special Condition No. 1 of this permit. This condition does not apply to emissions associated with tank cleaning operations.

    Tank roofs may only be landed for changes of tank service, inventory control, or tank inspection/maintenance as identified in the permit application. Tank roof landings include all operations when the tank floating roof is on its supporting legs. The following requirements apply to tank roof landings.

    A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the

maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This requirement does not apply where the vapor under a floating roof is routed to control or a controlled recovery system during this process.

B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin with the first stoppage of product withdrawal resulting in the roof landing unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Controlled degassing of the vapor space under landed roofs shall be completed as follows:

(1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv [or 34,000 ppmv if using an approved detector (e.g., FID TVA 1000)] or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.

(2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.

(3) A volume of purge gas/air equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas/air volume shall not include any additional air introduced into the control device or recovery system added to ensure good operation. The VOC sampling and analysis shall be performed as specified in Special Condition 16.

(4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the

sample probe or the collection system downstream of the process equipment or vessel being purged.

(5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.

C. Emissions from tank landing operations (Standing Idle, Degassing, and Refilling) shall be routed to a vapor combustor (EPN TKVCU). The vapor combustor shall achieve a minimum destruction efficiency of 99 percent control of the tank VOC emissions directed to it.

D. The tank shall not be opened or ventilated without control, except as allowed by (1) below until one of the criteria in part D of this condition is satisfied.

(1) Minimize air circulation in the tank vapor space.

a. One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.

b. Access points shall be closed when not in use

E. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.

(1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.

(2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:

a. Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR

435 Subpart A Appendix 1.

b. Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).

c. Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 16.

(3) No standing liquid verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank prior to opening without restriction and ventilating without control.

F. Tanks shall be refilled as rapidly as practicable until the roof is off its legs with the following exceptions:

(1) Only four tanks with a landed floating roof can be filled at any time at a rate not to exceed 20,000 bbl/hr.

(2) The vapor space below the tank roof is directed to a control device when the tank is refilled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled under the floating roof must exit through the control device.

G. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:

(1) the identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;

(2) the reason for the tank roof landing;

(3) for the purpose of estimating emissions, the date, time, and other information specified for each of the following events:

a. the roof was initially landed,
b. all liquid was pumped from the tank to the extent practical,
c. start and completion of controlled degassing, and total volumetric flow,
d. all standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
e. if there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled venting, and total volumetric flow,
f. refilling commenced, name and type of liquid filling the tank, and the volume necessary to float the roof; and
g. tank roof off supporting legs, floating on liquid;

(4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.

H. Emissions attributable to simultaneous tank re-filling, as defined in SC No. 15.F, and uncontrolled venting of tanks with products having a true vapor pressure greater than 0.5 psia are not authorized by this permit.

16. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

(1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument*RF

(2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

(3) If a TVA-1000 series FID analyzer calibrated with methane is used to determine the VOC concentration, a measured concentration of 34,000 ppmv may be considered equivalent to 10,000 ppmv as VOC. Use of a TVA-1000 series FID analyzer calibrated with methane to determine vapor space concentration for alcohols is not authorized.

B. Lower explosive limit measured with a lower explosive limit detector.

(1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.

(2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.

(3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

VAPOR COMBUSTORS

17. The vapor combustors, EPNs TKVCU, VCU, and WESTMVCS & EASTMVCS, shall achieve a 99% control of the waste gas directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1,225°F for EPN TKVCU, 1,225°F for EPN VCU, and 1,400°F for EPN WESTMVCS & EASTMVCS prior to the initial stack test performed in accordance with Special Condition 18. Following the completion of that stack test,

the six minute average temperature shall be maintained above the minimum one hour average temperature maintained during the last satisfactory stack test.

The vapor combustor exhaust temperature shall be continuously monitored and recorded when waste gas is directed to it. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, calibrated at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ±2 percent of the temperature being measured expressed in degrees Celsius or ±2.5$^{o}$C.

Quality-assured (or valid) data must be generated when the VCU is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded.

The vapor combustor shall be operated with no visible emissions and have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer’s specifications

Pilot and assist gas combusted at this facility shall be sweet natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet.

SAMPLING

18. 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 Tank Landing Vapor Combustor (EPN TKVCU), Railcar VCU (EPN VCU), and Loading Vapor Combustor system EPN WESTMVCS & EASTMVCS to demonstrate compliance with the MAERT. 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 Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

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. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office shall be notified not less than 30 days prior to sampling. The notice shall include:

(1) Proposed 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) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
(7) Procedure/parameters to be used to determine worst case emissions during 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 the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the vapor combustors to be tested for include (but are not limited to) VOC.

C. Sampling shall occur within 60 days after achieving the maximum production rate, but no later than 180 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 appropriate regional office.

D. The facility being sampled shall operate at maximum productions rates during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing

performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the production rate is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

E. Copies of the final sampling report shall be forwarded to the offices below 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 Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.
One copy to each local air pollution control program.

Sampling ports and platform(s) shall be incorporated into the design of vapor combustion units according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director. Use of a temporary platform is authorized for EPN (TKVCU).

19. The permit holder shall perform stack sampling for the Tank Roof Landing Vapor Combustor (EPN TKVCU), Railcar Loading VCU (EPN VCU), and Marine Loading Vapor Combustor System (EPN WESTMVCS & EASTMVCS) and in accordance with items A through E of special condition 18 whenever the operation is modified to increase emission, or upon the request of the TCEQ Executive Director.

20. The following requirements apply to capture systems for the Tank Roof Landing VCU (EPN TKVCU) Railcar Loading VCU (EPN VCU), and the Marine VCU (EPN WESTMVCS & EASTMVCS):

A. If used to control pollutants other than particulate, either:

(1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or

(2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

B. The control device shall not have a bypass, or if there is a bypass for the control device, comply with either of the following requirements:

(1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or

(2) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service.

C. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

## LEAK DETECTION AND REPAIR PROGRAM

21. Piping, Valves, Connectors, Pumps, Agitators, and Compressors - 28VHP

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

A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor

pressure of less than 0.044 pounds per square inch, absolute (psia) at 68*F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

i. piping and instrumentation diagram (PID);
ii. a written or electronic database or electronic file;
iii. color coding;
iv. a form of weatherproof identification; or
v. designation of exempted process unit boundaries.

B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

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

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. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times. A difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored annually.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors 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 an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

i. a cap, blind flange, plug, or second valve must be installed on the line or valve; or

ii. the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or 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, 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-sensing device 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.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed weekly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If

a mixture of VOCs are being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator 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. These seal systems 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.

H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained.

I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, 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 within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily

emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC § 115.782(c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC § 115.782(c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator=s log or equivalent.

K. Alternative monitoring frequency schedules of 30 TAC " 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

ADDITIONAL CONDITIONS

22. Facility-wide land-based emissions shall be calculated monthly, to include routine and tank roof landing/re-filling emissions from storage tanks (i.e, standing idle emissions after landings, re-filling emissions after landings, de-gassing emissions, routine withdrawal emissions, routine storage emissions, and planned maintenance events), all land-based loading emissions, barge and ship loading emissions, VCU emissions, and fugitive emissions. Total annual land-based emissions shall be kept on a rolling 12-month basis.

The records shall include tank or loading point identification number, control method used, tank or vessel capacity in gallons or barrels, 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 in gallons or barrels for the previous month and previous rolling 12-month period. The records shall also include the current number of roof landing events, duration of the off-float period of each landing event, initiation and duration of de-gassing operations as applicable, and total tons of emissions for the previous month and year-to-date (i.e., previous rolling 12-month period).

23. Unless otherwise specified, all records required in the special conditions of this permit and any additional records as required by 30 TAC ' 116.115(b)(2)(E) shall be recorded and maintained by the permit holder at the plant site for a period of at least two years. These records shall be made readily available to the TCEQ personnel upon request or any local air pollution control program having jurisdiction.

24. The loading, throughput, and emission limits authorized by this permit are effective upon the construction and operation of the first tank authorized by this permit.

25. This permit is conditioned on the completion of the following emission reduction projects for NSR permit 4850 as represented in the permit 93260 amendment application, PI-1 dated August 16, 2010.

    A. Reduce allowable emissions for EPN TKLAND to 270 tpy of VOC and establish an allowable benzene limit of 9.07 tpy.

    B. Include EPN EX-TNKS to establish an enforceable limit for emissions from the transfer of VOC liquids from an existing tank to a tank authorized by this permit.

    This reduction of emissions shall occur not later than the commencement of operation of the tanks authorized by this permit. The permit holder shall maintain records of these emission reductions. Construction of these facilities must commence as defined in 30 TAC Chapter 116, Subchapter B, Division 5 (Nonattainment) no later than five years after the all emission reductions identified in the netting analysis are actually accomplished, or the above reductions are no longer creditable, and the permit is void.

Dated August 2, 2011

ATTACHMENT A
Permit Number 93260
Storage Tank Authorization Summary

| EPN | Facility Type | Maximum Fill/Withdrawl Rate (bbls/hr) | Tank Throughput (bbls/yr) [1] |
|---|---|---|---|
| TK-419 | IFR | 55,000 | 4,320,000 |
| TK-420 | IFR | 55,000 | 4,320,000 |
| TK-421 | IFR | 55,000 | 4,320,000 |
| TK-422 | IFR | 55,000 | 4,320,000 |
| TK-423 | IFR | 55,000 | 4,320,000 |
| TK-424 | IFR | 55,000 | 4,320,000 |
| TK-425 | IFR | 55,000 | 4,320,000 |
| TK-426 | IFR | 55,000 | 4,320,000 |
| TK-427 | IFR | 55,000 | 4,320,000 |
| TK-302 | IFR | 55,000 | 10,800,000 |
| TK-265 | IFR | 55,000 | 3,312,000 |
| TK-304 | IFR | 55,000 | 10,800,000 |
| TK-392 | IFR | 55,000 | 6,768,000 |
| TK-395 | IFR | 55,000 | 1,800,000 |
| TK-396 | IFR | 55,000 | 3,312,000 |
| TK-418 | IFR | 55,000 | 4,320,000 |
| TK-428 | IFR | 55,000 | 4,320,000 |

1. Annual throughputs are shown for reference only. An annual throughput greater than the annual throughput shown in this table is not a separately enforceable condition of this permit.

Dated August 2, 2011

ATTACHMENT B
Permit Number 93260
Approved Products List

| | |
|---|---|
| Alkylate | Jet Fuels[1] |
| Cat Feed Stock | Kerosenes[1] |
| Condensate (Natural Gasoline) | Methanol |
| Crude Oil | Naphtha |
| Cumene | Raffinate |
| Diesel Fuels[1] | Recovered Oil |
| Distillate Blendstock | Reformate |
| Ethyl Tert Butyl Ether (ETBE) | Reformer Feedstock |
| Ethanol | Residual Fuel Oils[1,2] |
| Fuel Oils (Includes Distillate Fuel Oils[1]) | Toluene |
| Gasoline | Toluene/Xylene |
| Gasoline Blendstocks[1] | Xylene |

Notes:

1. Refer to Product Synonym List (Attachment C) for a listing of synonyms for diesel fuels, jet fuels, kerosenes, distillate fuels, and residual fuel oils.

2. Tanks may store a Transmix of approved products, that is the term for a mixture of products (e.g. gasoline and diesel mixture, or high and low sulfur distillate products)

Dated August 2, 2011

ATTACHMENT C
Permit Number 93260
Product Synonym List

**Diesel Fuels**
Diesel (High, Low and Ultra Low Sulfur)
Distillate
Heavy Marine Diesel
Marine Diesel
Marine Gas Oil
Middle Distillate
Biodiesel

**Jet Fuels**
Aviation Kerosene
DERD
Jet A-1
Jet Fuel A
Jet-A
Jet Kerosene
JP-1
JP-5
JP-8

**Kerosenes**
K-1
K-2
Kerosene
No. 1 Fuel Oil

**Distillate Fuel Oils**
Fuel Oil No. 2
Fuel Oil No. 4
LFO
LightCatCracked Distillate
Light Cat Cracked Gas Oil
Light Cycle Oil
Light Fuel Oil
Light Pyrolysis Oil
LPO
No. 4 Oil

**Residual Fuel Oils**
Bunker C
Bunker Fuel
Carbon Black
Carbon Black Feedstock
Carbon Black Oil
Cat Bottoms
Cat Cracked Slurry Oil
Cat Cracker Feedstock
Cat Feed
Catalytic Feed
Coal Tar
Coker
Coker Feed
Coker Gas
Coker Gas Oil
Cutterstock
Cutterstock/MDO
Decant Oil
Fuel Oil Cutter Stock
Fuel Oil No. 5
Fuel Oil No. 6
Gas Oil
Heavy Aromatic Oil
Heavy Cat Gas
Heavy Cycle Oil
Lube Oil
No. 6 Oil
Py Tar
Pyrolysis Fuel Oil
Pyrolysis Tar
Reduced Crude

ATTACHMENT C
Permit Number 93260
Product Synonym List

**Residual Fuel Oils Continued**

Transmix
Slop
Slurry
Slurry Oil
Straight Run
Straight Run Fuel Oil
Straight Run Residuals
VGO
VGO/Kerosene
Virgin Gas Oil

**Gasoline Blendstocks**

Alkylate
Cat Feed Stock
Cumene
ETBE
Ethanol
Heavy Pyrolysis Gasoline
Naphtha
Natural Gasoline
Raffinate
Reformate
Reformer Feed Stock
Toluene
Toluene/Xylene
Xylene

Dated August 2, 2011