16 May 2016

Mr. Todd D. Turcotte, P.E. President Capital Terminal Company 100 Dexter Road East Providence, RI 02914

Dear Mr. Turcotte:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your request for the modifications to your bulk gasoline terminal located at 100 Dexter Road, East Providence, RI.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval Nos. 2323-2329).

Any source with the potential to emit greater than major source thresholds as defined under Air Pollution Control Regulation No. 29, "Operating Permits" is subject to the Operating Permit Program. Your facility is currently subject to the Operating Permit Program as an Emissions Cap Source, with allowable emissions restricted to below the major source threshold. An emissions cap means any emission limitation or physical or operational limitation, imposed in a federally enforceable document that establishes the maximum quantity of emissions which may be released from a stationary source. The Office of Air Resources considers this minor source permit an emissions cap. Air Pollution Control Regulation No. 28, "Operating Permit Fees" requires stationary sources with an emissions cap to pay an annual compliance/assurance fee of \$350.00. Notification concerning the payment of this fee will be mailed to you during the fall of this year.

If there are any questions concerning this permit, please contact me at 401-222-2808, extension 7415 or at stephen.stamand@dem.ri.gov.

Sincerely,

Stephen G. St. Amand Air Quality Specialist Office of Air Resources

cc: East Providence Building Official Kelly A. Cowan, P.E. – Woodard & Curran

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR RESOURCES**

MINOR SOURCE PERMIT

CAPITAL TERMINAL COMPANY

APPROVAL NOs. 2323-2329

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Capital Terminal Company

For the following:

The conversion of Tanks A-25 (Approval No. 2323), A-32 (Approval No. 2324), A-151 (Approval

No. 2325), A-153 (Approval No. 2326), A-154 (Approval No. 2327), and A-175 (Approval No.

2328) to store gasoline, ethanol, or other petroleum liquids that have a Reid vapor pressure of

4.0 psia or less as determined by ASTM Method D323. Installation of a vapor recovery unit

(Approval No. 2329) to control VOC emissions from the loading rack.

Located at: 100 Dexter Road, East Providence, RI

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve Capital Terminal Company from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Chief Office of Air Resources

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

CAPITAL TERMINAL COMPANY

APPROVAL NOs. 2323-2329

A. Emission Limitations

- 1. Loading Racks
 - a. Total organic compound emissions to the atmosphere from the vapor collection and processing system due to the loading of liquid product into gasoline tank trucks shall not exceed 2 mg/liter of product loaded.
- 2. Facility-Wide
 - a. Benzene Emissions Limitation

The total quantity of benzene emissions discharged to the atmosphere from the entire facility shall not exceed:

- (1) 0.043 pounds per hour; and
- (2) 1.03 pounds per day; and,
- (3) 375 pounds in any consecutive 12-month period.
- b. Toluene Emission Limitation

The total quantity of toluene emissions discharged to the atmosphere from the entire facility shall not exceed:

- (1) 0.184 pounds per hour; and
- (2) 1,616 pounds in any consecutive 12-month period.
- c. Hazardous Air Pollutant (HAP) Emission Limitations

The total quantity of Hazardous Air Pollutant (HAP) emitted from the entire facility shall not exceed 1,500 pounds of any one (1) HAP or 4,000 pounds of any combination of HAPs per calendar month based upon a 12-month rolling average.

d. Listed Toxic Air Contaminants Emission Limitations

The total quantity of emissions discharged to the atmosphere from the entire facility, of any listed toxic air contaminant other than benzene and toluene shall not exceed the minimum quantity for that contaminant as specified in Appendix A of Air Pollution Control Regulation No. 9 in any consecutive 12-month period. Emissions from activities exempted from the provisions of APC Regulation No. 22 in subsection 22.2.2 are not included in this limitation.

e. Volatile Organic Compounds (VOC)

The total quantity of VOC emissions discharged to the atmosphere from the entire facility shall not exceed 8,167 pounds of VOC per calendar month based upon a 12-month rolling average.

- B. Operating Requirements
 - 1. Loading Racks
 - a. The loading rack shall be equipped with a vapor collection and processing system designed to collect the total organic compounds vapors displaced from gasoline tank trucks during product loading and to reduce the quantity of displaced vapors prior to discharge to the atmosphere. The vapor collection system shall be a vacuum-assist system which will produce a vacuum in the tank truck during all loading operations. The manufacturer's target vacuum negative pressure shall be maintained during loading of the tank truck.
 - b. Any connecting pipe or hose from the loading rack to the gasoline tank truck and any vapor space connection on the gasoline tank truck shall be equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic materials to the best extent possible.
 - c. Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the procedures specified in Conditions B.1.c (1)-(5). A vapor-tight gasoline truck is a tank truck which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in Condition C.3 and which displays a sticker near the Department of Transportation Certification plate that indicates the date the gasoline tank truck last passed the test required in Condition C.3 and the identification number of the gasoline tank truck.
 - (1) The owner/operator shall obtain the vapor tightness documentation described in Condition E.1.a(2) for each gasoline tank truck that is to be loaded.

- (2) The owner/operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded, unless either of the following conditions is maintained:
 - (a) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
 - (b) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

If either the quarterly or semiannual cross-check provided in paragraphs (a) and (b) of this condition reveals that these conditions were not maintained, the owner/operator must return to biweekly monitoring until such time as these conditions are again met.

- (3) The owner/operator shall crosscheck each tank identification number obtained above with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.
- (4) The terminal owner/operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the facility within 1 weeks after the loading has occurred.
- (5) The terminal owner/operator shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that gasoline tank truck is obtained.
- d. The owner/operator shall act to assure that loadings of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
- e. The owner/operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the loading rack.
- f. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4500 Pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in Condition C.2.

- g. No pressure-vacuum vent in the vapor collection system shall begin to open at a system pressure less than 4500 Pascals (450 mm of water).
- h. Loading of gasoline into tank trucks shall only be from the bottom (bottom filling).
- i. The owner/operator shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the operating parameter value established using the procedures in Condition C.1.i. Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as specified above, shall constitute a violation of the emission standard in Condition A.1.
- 2. Storage Vessels (Tanks No. A-25, A-32, A-151, A-153, A-154, and A-175)
 - a. Each storage vessel shall be allowed to store:
 - (1) gasoline; or,
 - (2) ethanol; or,
 - (3) other petroleum liquids that have a Reid vapor pressure of 4.0 psia or less as determined by ASTM Method D323.
 - b. Each storage vessel shall be equipped with a fixed roof in combination with an internal floating roof and shall meet the following specifications:
 - (1) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be accomplished as rapidly as possible.
 - (2) Each internal 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:
 - (a) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - (b) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the

floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

- (3) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- c. Each internal floating roof shall be equipped with a closure seal, or seals, to close the space between the roof edge and tank wall such that:
 - (1) the cover must float uniformly on the liquid;
 - (2) there is no accumulated liquid on the cover, and;
 - (3) the seal is intact and uniformly in place around the circumference of the cover between the cover and tank wall.
- d. Where applicable, all openings, except stub drains, are equipped with covers, lids, or seals such that:
 - (1) the cover, lid, or seal is in the closed position at all times except when in actual use, and
 - (2) automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports, and
 - (3) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- 3. Storage Vessels (Tanks No. A-67, A-97, and A-152)
 - a. Shall only store distillate fuel.
 - b. Shall be equipped with a fixed roof.
- 4. Facility-Wide
 - a. The total quantity of storage tank throughput, including in-tank blending/transfers, shall not exceed the following:
 - (1) 81,291,519 gallons of ethanol in any 12-month period;
 - (2) 227,277,666 gallons of distillate fuel oil in any 12-month period;
 - (3) 406,457,595 gallons of gasoline in any 12-month period.

- b. The total quantity of load rack throughput shall not exceed the following:
 - (1) 54,194,346 gallons of ethanol in any 12-month period;
 - (2) 151,518,444 gallons of distillate fuel oil in any 12-month period;
 - (3) 270,971,730 gallons of gasoline in any 12-month period.
- c. The owner/operator shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills;
 - (2) Clean up spills as expeditiously as practicable;
 - (3) Cover all open gasoline containers with a gasketed seal when not in use;
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- C. Test Methods and Procedures
 - 1. Carbon Adsorber
 - a. Within 180 days of start-up of the carbon adsorber, performance testing shall be conducted to demonstrate compliance with the applicable emission limitation in Condition A.1. Performance testing shall be conducted in accordance with the test methods and procedures in 40 CFR 60.503(c).
 - b. A stack testing protocol shall be submitted to the Office of Air Resources and to the U.S. Environmental Protection Agency (USEPA) for review and approval prior to the performance of any stack tests. The owner/operator shall provide the Office of Air Resources and the USEPA at least 60 days prior notice of any stack test.
 - c. All test procedures used for stack testing shall be approved by the Office of Air Resources and the USEPA prior to the performance of any stack tests.
 - d. The owner/operator shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment.
 - e. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitations.

- f. A final report of the results of stack testing shall be submitted to the Office of Air Resources and the USEPA no later than 60 days following completion of testing.
- g. All stack testing must be observed by the Office of Air Resources and the USEPA to be considered acceptable, unless the Office of Air Resources or the USEPA provides prior written authorization to the owner/operator to conduct the testing without an observer present.
- h. Immediately before conducting any performance test required to determine compliance with Condition A.1 and B.1.f, the owner/operator shall use 40 CFR 60, Appendix A, Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The owner/operator shall repair all leaks with readings of 500 ppm (as methane) or greater before conducting the performance test.
- i. During the performance test conducted under Condition C.1, the owner/operator shall determine a monitored operating parameter value for each vapor processing system using the following procedure:
 - (1) During the performance test, continuously record the operating parameter for the continuous emission monitoring system required by Condition D.1;
 - (2) Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations; and
 - (3) Provide for the Office of Air Resource's and the USEPA's approval, the rationale for the selected operating parameter value and monitoring frequency and averaging time, including data and calculations used to develop the value and a description of why the value, monitoring frequency and averaging time demonstrate continuous compliance with the emission standard in Condition A.1.
- j. For performance tests performed after the initial test, the owner/operator shall document the reasons for any change in the operating parameter value since the previous performance test.
- 2. Vapor collection and liquid loading equipment
 - a. The owner/operator shall determine compliance with the standard in Condition B.1.f as follows:
 - (1) A pressure measurement device (liquid manometer, magnehelic gauge or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ± 2.5 mm of water precision, shall

be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.

- (2) During any performance test, the pressure shall be recorded every 5 minutes while a gasoline tank truck is being loaded; the highest instantaneous pressure that occurs during each loading shall be recorded. Every loading position must be tested at least once during the performance test.
- 3. Annual Certification Test for Gasoline Tank Trucks

The annual certification test for gasoline tank trucks shall consist of the following test methods and procedures:

- a. EPA Method 27, Appendix A-8, 40 CFR 60. Conduct the test using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (Pi) for the pressure test shall be 460 mm H₂O (18 in. H₂O), gauge. The initial vacuum (Vi) for the vacuum test shall be 150 mm H₂O (6 in. H₂O), gauge. The maximum allowable pressure and vacuum changes (Δp , Δv) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 min.
- 4. Facility-Wide

Performance tests conducted for this permit shall be conducted under such conditions as the Office of Air Resources or the USEPA specifies to the owner/operator, based on representative performance (*i.e.*, performance based on normal operating conditions) of the facility. Upon request, the owner/operator shall make available to the Office of Air Resources or the USEPA such records as may be necessary to determine the conditions of performance tests.

- D. Monitoring Requirements
 - 1. Loading Racks
 - a. The owner/operator shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous emissions monitoring system (CEMS) capable of measuring organic compound concentration in the exhaust air stream of the carbon adsorber.
 - b. The owner/operator shall continuously monitor the pressure in the vapor recovery line connected to tank truck.

- 2. Storage Vessels
 - a. After installing the control equipment required to meet Condition B.2.b (permanently affixed roof and internal floating roof), the owner/operator shall:
 - (1) Visually inspect the internal floating roof, the primary seal, and the secondary seal, prior to filling the storage vessel with product. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or both, the owner or operator shall repair the items before filling the storage vessel.
 - For vessels equipped with a liquid-mounted or mechanical shoe seal, (2)the owner/operator shall visually inspect the internal floating roof, the primary seal and the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the liquid surface, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner/operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during the above inspection cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Office of Air Resources and the USEPA in the inspection report required in Condition F.1.b. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
 - (3) The owner/operator shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied or degassed or once every ten years, whichever is more frequent. If the internal floating roof has defects, the primary seal or secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere or the slotted membrane has more than 10 percent open area, the owner/operator shall repair the items as necessary so that none of the conditions specified this paragraph exist before refilling the storage vessel with gasoline.
- 3. Facility-Wide
 - a. The owner/operator shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Each piece of equipment shall be inspected during the loading of a gasoline cargo tank.

- b. A log book shall be used and shall be signed by the owner/operator at the completion of each inspection. A section of the log shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.
- c. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in Condition D.3.d. of this permit.
- d. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner/operator shall provide in the semiannual report specified in Condition F.2.g the reason(s) a delay is needed and the date by which each repair is expected to be completed.
- e. As an alternative to compliance with the provisions in Conditions D.3.a-d of this section of the permit, the owner/operator may implement an instrument leak-monitoring program that has been demonstrated to the Office of Air Resources and USEPA as at least equivalent.

E. Recordkeeping Requirements

- 1. Loading Racks
 - a. The owner/operator shall keep records of the test results for each gasoline tank truck loading at the facility as follows:
 - (1) Annual certification testing performed under Condition C.3; and
 - (2) The documentation file shall be kept updated at least once per year to reflect current test results as determined by Method 27 for each gasoline tank truck loading at the facility. The documentation for each test shall include, as a minimum, the following information:
 - (a) Name of test: Annual Certification Test—Method 27 [Condition C.3.a]
 - (b) Cargo tank owner's name and address.
 - (c) Cargo tank identification number.
 - (d) Test location and date.
 - (e) Tester name and signature.

- (f) Witnessing inspector, if any: Name, signature, and affiliation.
- (g) Vapor tightness repair: nature of repair work and when performed in relation to vapor tightness testing.
- (h) Test results: Test pressure, pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument and leak definition.
- b. As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in paragraph (a) of this section, the owner/operator may comply with the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.
 - (1) An electronic copy of each record is instantly available at the terminal.
 - (a) The copy of each record in paragraph (b)(1) of this section is an exact duplicate image of the original paper record with certifying signatures.
 - (b) The USEPA is notified in writing that each terminal using this alternative is in compliance with paragraph (b)(1) of this section.
 - (2) For facilities that use a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by the Office of Air Resources or the USEPA during the course of a site visit, or within a mutually agreeable time frame.
 - (a) The copy of each record in paragraph (b)(2) of this section is an exact duplicate image of the original paper record with certifying signatures.
 - (b) The USEPA is notified in writing that each terminal using this alternative is in compliance with paragraph (b)(2) of this section.
- c. The owner/operator shall keep an up-to-date, readily accessible record of the continuous emissions monitoring data required under Condition D.1. This record shall indicate the time intervals during which loadings of gasoline tank trucks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record.

- d. The owner/operator shall record and report simultaneously with the notification of compliance status required under 40 CFR 63.9(h), all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under Condition C.1.i.
- e. The tank truck vapor tightness documentation required under Condition B.1.c shall be kept on file at the terminal in a permanent form available for inspection.
- f. The owner/operator shall keep records of all replacements or additions of components performed on the vapor processing system for at least 5 years.
- g. The owner/operator shall keep documentation of all notifications required under Condition B.1.c(4) on file at the terminal for at least 2 years.
- h. The owner/operator shall maintain the following records for the loading rack:
 - (1) Records of daily throughput quantities of gasoline, ethanol, gasoline-additives, and distillate fuel oil.
 - (2) Records of daily throughput quantities of distillate fuel oil that is top-loaded in to tank trucks.
 - (3) Records of the operating hours of the vapor recovery unit.
 - (4) Records of both scheduled and unscheduled maintenance of the vapor processing system.
- 2. Storage Vessels
 - a. The owner/operator shall on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of gasoline, ethanol, distillate, or petroleum liquid loaded into each storage tank (including intank blending/transfers) for that month. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
 - b. The owner/operator shall maintain records of each inspection performed as required by Condition D.2.a. Each record shall contain:
 - (1) The identity of the storage vessel;
 - (2) The date the vessel was inspected; and
 - (3) The observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

- c. The owner/operator shall maintain readily accessible records for the life of the storage tank showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for all storage tanks used for gasoline and ethanol storage.
- d. The owner/operator shall maintain the following records for all gasoline and ethanol storage vessels:
 - (1) The product stored, the period of storage, and the maximum true vapor pressure of that product during the respective storage period for each tank.
 - (2) Records for both scheduled and unscheduled maintenance.
- e. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:
 - (1) For storage tanks 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.
 - (2) For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) 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 in API Bulletin 2517, unless the Office of Air Resources or the USEPA specifically requests that the liquid be sampled, the actual storage temperature determined and the Reid vapor pressure determined from the sample(s).
 - (b) 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.
 - (3) For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM D2879-83, 96, or 97; or
 - (c) Measured by an appropriate method approved by the USEPA; or

- (d) Calculated by an appropriate method approved by the USEPA.
- f. The owner/operator shall keep a record of each inspection performed as required by Condition D.2. 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. Facility-Wide
 - a. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of VOCs discharged to the atmosphere from the entire facility. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
 - b. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total quantity of benzene and toluene discharged to the atmosphere from the entire facility during the previous month. Hourly emission averages shall be calculated for benzene and toluene. These hourly averages shall be used for comparison to the hourly emission limitations. Daily emission totals shall be calculated for benzene to be used for comparison the daily emission limitations. Monthly and annual emission averages shall be calculated for benzene and toluene to be used for comparison to the annual emission limitations. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
 - c. The owner/operator, to comply with the provisions of Condition D.3 shall record the following information in the logbook for each leak that is detected:
 - (1) Date of inspection,
 - (2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak,
 - (3) The equipment type and identification number,
 - (4) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell),
 - (5) The date the leak was detected and the date of each attempt to repair the leak,
 - (6) Repair methods applied in each attempt to repair the leak,

- (7) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days),
- (8) "Repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak,
- (9) The expected date of successful repair of the leak if the leak is not repaired within 15 days, and
- (10) Inspector name and signature.
- d. The owner/operator shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. If the owner/operator has elected to implement an instrument program pursuant to Condition D.3.e, the record shall also contain a full description of the program.
- e. The owner/operator shall prepare and maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- f. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition H.10 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- F. Reporting Requirements
 - 1. Storage Vessels
 - a. After installing control equipment in accordance with Condition B.2.b the owner/operator shall meet the following requirements:
 - (1) Furnish the Office of Air Resources and the USEPA with a report that describes the control equipment and certifies that the control equipment meets the specifications of Condition B.2.b and Condition D.2.a(1). The report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
 - (2) If any of the conditions described in Condition D.2.a(2) are detected during the annual visual inspection required by Condition D.2.a.(2), a report shall be furnished to the Office of Air Resources and the USEPA 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 and the date of the repair was made.

- b. The owner/operator shall notify the Office of Air Resources and the USEPA, in writing, at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Condition D.2.a(1) and D.2.a(3), to afford the Office of Air Resources and the USEPA the opportunity to inspect the storage vessel prior to refilling. If the inspection required by Condition D.2.a(3) is not planned and the owner/operator could not have known about the inspection 30 days in advance of refilling the tank, the owner/operator shall notify the Office of Air Resources and the USEPA 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 Office of Air Resources and the USEPA at least 7 days prior to the refilling.
- 2. Facility-Wide
 - a. The owner/operator must submit an Initial Notification to the Office of Air Resources and the USEPA as specified in 40 CFR 63.9(b).
 - b. The owner/operator must submit a Notification of Compliance Status to the Office of Air Resources and the USEPA as specified in 40 CFR 63.9(h). The Notification of Compliance Status must specify which of the compliance options under Condition B.2.b is used to comply with this permit.
 - c. The owner/operator must submit a Notification of Performance Test to the Office of Air Resources and the USEPA, as specified in 40 CFR 63.9(e), prior to initiating testing required by Condition C.1.a.
 - d. The owner/operator must submit additional notifications to the Office of Air Resources and the USEPA specified in 40 CFR 63.9, as applicable.
 - e. The owner/operator shall submit a semiannual compliance report to the Office of Air Resources and the USEPA that includes the information specified in 40 CFR 63.11095(a).
 - f. The owner/operator shall submit a semiannual report to the Office of Air Resources and the USEPA including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction to minimize emissions in accordance with Condition H.10, including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report.
 - g. The owner/operator shall include in the semiannual compliance report to the Office of Air Resources and the USEPA the following information:

- (1) Each loading of a gasoline tank truck for which vapor tightness documentation had not been previously obtained by the facility;
- (2) The number of equipment leaks not repaired within 15 days after detection.
- h. The owner/operator shall submit an excess emissions report to the Office of Air Resources and the USEPA at the time the semiannual compliance report is submitted. Excess emissions events under this permit, and the information to be include in the excess emissions report are specified in paragraphs c(1) through c(5) below:
 - (1) Each instance of a non-vapor-tight gasoline tank truck loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.
 - (2) Each reloading of a non-vapor-tight gasoline tank truck at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with Condition E.1.a.
 - (3) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under Condition C.1.i. The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing system or the CEMS.
 - (4) For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection:
 - (a) The date on which the leak was detected,
 - (b) The date of each attempt to repair the leak,
 - (c) The reasons for the delay of repair, and
 - (d) The date of successful repair.
- i. The owner/operator shall notify the Office of Air Resources in writing, within 15 days, whenever any of the following occurs:
 - (1) The total quantity of ethanol throughput for the storage tanks, including in-tank blending/transfers, exceeds 81,291,519 gallons in any 12-month period.

- (2) The total quantity of distillate fuel oil throughput for the storage tanks, including in-tank blending/transfers, exceeds 227,277,666 gallons in any 12-month period.
- (3) The total quantity of gasoline throughput for the entire facility stored in the storage tanks, including in-tank blending/transfers, exceeds 406,457,595 gallons in any 12-month period.
- j. The owner/operator shall notify the Office of Air Resources in writing, within 15 days, whenever any of the following occurs:
 - (1) The total quantity of ethanol throughput for the loading racks exceeds 54,194,346 gallons in any 12-month period.
 - (2) The total quantity of distillate fuel oil throughput for the loading racks exceeds 151,518,444 gallons in any 12-month period.
 - (3) The total quantity of gasoline throughput for the loading racks exceeds 270,971,730 gallons in any 12-month period.
- k. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the total quantity of VOC discharged to the atmosphere from the entire facility exceeds 8,167 pounds per calendar month based upon a 12-month rolling average.
- 1. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of benzene and toluene, discharged to the atmosphere from the entire facility exceeds the hourly, daily, or annual emission limitations.
- m. The owner/operator shall notify the Office of Air Resources of any record showing noncompliance with the terms of this permit or any other air pollution control rule or regulation applicable to the facility by sending a copy of the record to the Office of Air Resources within 30 days following the occurrence.
- n. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
- o. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
 - (1) Change the representation of the facility in the application.
 - (2) Alter the applicability of any state or federal air pollution rules or regulations.
 - (3) Result in the violation of any terms or conditions of this permit.

(4) Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

- p. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - (1) The name and location of the facility;
 - (2) The subject source(s) that caused the noncompliance with the permit term;
 - (3) The time and date of first observation of the incident of noncompliance;
 - (4) The cause and expected duration of the incident of noncompliance;
 - (5) The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
 - (6) The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
- q. All records required as a condition of this permit must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.
- G. Malfunctions
 - 1. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

- a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;
- b. The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- c. Repairs necessary to bring the air pollution control system back to normal and proper operation were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable. Any parts or material needed should be shipped overnight where possible or practical.
- d. All possible steps were taken to minimize emissions during the period of time that the repairs were performed.
- e. Emissions during the period of time that the repairs were performed will not:
 - Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
- f. The reasons that it would be impossible or impractical to cease the source operation during said period.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

H. Other Permit Conditions

- 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed, and operated in accordance with the representation of the facility in the permit application.
- 2. Wherever the term "gasoline" is used throughout this permit, it shall mean any petroleum distillate having a Reid vapor pressure of more than 4.0 psia as

determined by ASTM Method D323. Therefore, for example, the requirements would apply to ethanol.

- 3. The facility is subject to the requirements of the Office of Air Resource's Air Pollution Control Regulation No. 11 "Petroleum Liquids Marketing and Storage". If there is any conflict between any term or condition of this permit and the applicable provisions of APC Regulation No. 11, the owner/operator shall comply with the term or condition of this permit.
- 4. The facility is subject to the requirements of the following Federal National Emission Standards for Hazardous Air Pollutants for Source Categories:
 - a. 40 CFR 63 Subpart A, "General Provisions"
 - b. 40 CFR 63 Subpart BBBBBB, "National Emission Standards for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipelines"

Compliance with all applicable provisions therein is required.

- 5. The facility is subject to the requirements of the following Federal New Source Performance Standards:
 - a. 40 CFR 60 Subpart A, "General Provisions"
 - b. 40 CFR 60 Subpart Kb, "Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced After July 23, 1984"
 - c. 40 CFR 60 Subpart XX, "Standards of Performance for Bulk Gasoline Terminals"

Compliance with all applicable provisions therein is required.

- 6. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
- 7. There shall be no bypassing of the air pollution control equipment during times when VOC is being discharged to the device.
- 8. Except as provided in Condition H.9, the owner/operator shall not store, sell or supply as fuel, at or from this facility, a gasoline having a Reid Vapor Pressure greater than 9.0 pounds per square inch, during the period of 1 May through 15 September of each year. Sampling and testing of gasoline shall be in accordance with ASTM Method D323-82 or any equivalent method approved by the Office of Air Resources and the USEPA.

- 9. The owner/operator shall not store, sell or supply as fuel, at or from this facility, a gasoline ethanol blend (containing at least 9% ethanol) having a Reid Vapor Pressure greater than 10.0 pounds per square inch, during the period of 1 May through 15 September of each year. Sampling and testing of gasoline ethanol blends shall be in accordance with ASTM Method D323-82 or any equivalent method approved by the Office of Air Resources and the USEPA.
- 10. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources and the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
- I. Definitions

As used throughout this permit, the following terms shall, where the context permits, be construed as follows:

"Best extent possible" means there shall be no reading at 2.5 centimeters from any potential leak source, greater than or equal to 100% of the lower explosive limit, LEL, measured as propane, as detected by a combustible gas detector using the test procedure described in Appendix B of the EPA document entitled "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (EPA-450/2-78-051).

"Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

"Equipment" means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems. This definition also includes the entire vapor processing system except the exhaust port(s) or stack(s).

"Fill" means the introduction of gasoline or petroleum liquid into a storage vessel but not necessarily to complete capacity.

"Gasoline" means any petroleum distillate having a Reid vapor pressure of more than 4.0 psia as determined by ASTM Method D323. This term includes but is not limited to mixtures of alcohols and gasoline.

"Gasoline tank truck" means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load.

"In gasoline service" means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.

"Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid around the circumference of the tank between the tank wall and the floating roof.

"Loading rack" means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill delivery tank trucks.

"Operating parameter value" means a value for an operating or emission parameter of the vapor processing system (e.g., temperature) which, if maintained continuously by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with the applicable emission standard. The operating parameter value is determined using the procedures outlined in Condition C.1.i.

"Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale and coal.

"Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

"Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases, as determined by ASTM D323-82 or 94.

"Storage vessel" means each tank, reservoir, or container used for the storage of gasoline or other petroleum liquids that have a Reid vapor pressure of 4.0 psia or less as determined by ASTM Method D323.

"Total organic compounds" means those compounds measured according to the procedures in 40 CFR 60.503(c).

"Vapor collection system" means any equipment used for containing total organic compounds vapors displaced during the loading of gasoline tank trucks.

"Vapor processing system" means all equipment used for recovering or oxidizing total organic compound vapors displaced from this facility.

"Vapor tight" means equipment that allows no loss of vapors. Equipment is considered vaportight if the vapor concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

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