

217/782-2113

CONSTRUCTION PERMIT -- NSPS SOURCE

PERMITTEE

Plains Marketing, L.P.
Attn: Richard Anderson, Manager of Air Programs
Post Office Box 4648
Houston, Texas 77210

Application No.: 11050024

I.D. No.: 121810AAP

Applicant's Designation:

Date Received: May 17, 2011

Subject: Five Storage Tanks

Date Issued:

Location: 8900 Farthing Road, Vernon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of five storage tanks with external floating roofs (the affected tanks) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 UNIT SPECIFIC CONDITIONS

1.1 Unit Specific Conditions for the Affected Storage Tanks

1.1.1 Description

The affected storage tanks would be used to store crude oil and petroleum liquids. To minimize emissions, each tank would be equipped with an external floating roof.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Storage Tank No.	Description	Emission Control Equipment
P1015	Storage Tanks (400,000 barrel capacity each)	External Floating Roof, with Mechanical Shoe Primary Seal and Rim- Mounted Secondary Seal
P1016		
P1017		
P1018		
P1019		

1.1.3-1 Applicable Federal Emission Standards

- a. The affected tanks are subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb.

- b. Pursuant to the NSPS, the external floating roof for each affected tank must meet the following specifications of the NSPS [40 CFR 60.112b (a)(2)]:
 - i. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal [40 CFR 60.112b(a)(2)(i)].
 - A. The primary seal shall be a mechanical shoe seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall [40 CFR 60.112b(a)(2)(i)(A)].
 - B. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4) [40 CFR 60.112b(a)(2)(i)(B)].
 - ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening [40 CFR 60.112b(a)(2)(ii)].
 - iii. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports)

except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible [40 CFR 60.112b(a)(2)(iii)].

1.1.3-2 Applicable State Emission Standards

- a. The affected tanks are subject to 35 IAC 215.121(b)(1), which provides that:

No person shall cause or allow the storage of any volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 293.3°K (70°F) in any stationary tank, reservoir, or other container of more than 151 cubic meters (40,000 gallons) capacity unless such tank, reservoir or other container is designed and equipped with a floating roof, as follows, or other vapor loss control device as specified by 35 IAC 215.121(b)(1).

A floating roof which rests on the surface of the volatile organic liquid and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the volatile organic liquid has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.

- b. The affected tanks are subject to 35 IAC 215.122(b), which provides that:

No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or submerged fill.

1.1.4 Non-Applicability Provisions

- a. i. This permit is issued based on the project addressed by this permit being a separate project from the previously permitted projects at this source. This is because this project

was not yet planned at the time when earlier projects were being undertaken.

ii. This permit is issued based on the increase in emissions from the construction of the affected tanks not constituting a major modification subject to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

b. This permit is issued based on each affected tank not being subject to 35 IAC 215.123(b) or 215.124(a) as provided by 35 IAC 215.123(a)(5) and 215.124(b)(1), because the affected tank is subject to the NSPS, 40 CFR Part 60, Subpart Kb.

1.1.5 Operating Limits

- a. Throughput of material for all affected tanks (combined) shall not exceed 51,537,000 barrels per 12 month period.
- b. Volatile organic liquids with a true vapor pressure greater than 76.6 kPa shall not be stored in the affected tanks.

1.1.6 Emission Limitations

- a.
 - i. Emissions of volatile organic material (VOM) from the affected tanks including roof landing losses shall not exceed 38.3 tons/year, in total.
 - ii. The VOM emissions from the affected storage tanks and from associated piping, flanges and other components shall not exceed 38.5 tons/year, in total.
- b. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source, including the affected tanks, in total, shall be less than 9.8 tons/year of any single HAP and 24.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on this source not being a major source for emissions of HAP and this project not triggering the requirements of 40 CFR 63, Subpart EEEE, the NESHAP for Organic Liquids Distribution (Non Gasoline).
- c. Compliance with annual limits shall be determined from a running total of 12 months of data, i.e., from the sum of the data for each month plus the preceding 11 months.

1.1.7 Equipment Testing Requirements

The Permittee shall fulfill all applicable equipment testing requirements of 40 CFR 60.113b(b) for each affected tank [40 CFR 60.113b(b)].

1.1.8 Equipment Inspection Requirements

The Permittee shall fulfill all applicable operational requirements of 40 CFR 60.116b for each affected tank [40 CFR 60.116b].

1.1.9 Recordkeeping Requirements

- a. The Permittee shall fulfill all applicable recordkeeping requirements of the NSPS for the affected tanks [40 CFR 60.115b], including keeping readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels. This record shall be kept for the life of the tanks [40 CFR 60.116b(a) and (b)];
- b. The Permittee shall maintain records of the following items for the affected tanks:
 - i. The properties of materials stored in the affected tanks, as related to VOM and HAP emissions, including vapor pressure and molecular weight, with supporting documentation;
 - ii. The throughput of each affected tank (gallons/month and gallons/year, by type of material); and
 - iii. The occurrence of roof landing events, with description.
- c. The Permittee shall maintain the following records related to emissions, with supporting calculations:
 - i. The VOM and HAP emissions from the affected storage tanks (tons/12-month period), based on the material stored, material throughputs, number and nature of roof landing events, and other operational information.
 - ii. The VOM emissions from components associated with the affected tanks (tons/12-month period).

- iii. The HAP emissions from all tanks and associated components at the source (tons/12-month period).
- d. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

1.1.10 Reporting Requirements

- a. The Permittee shall fulfill all applicable reporting requirements specified in 40 CFR 60.115b(b) for the affected tanks [40 CFR 60.115b].
- b. The Permittee shall promptly notify the Illinois EPA of deviations of the affected tanks with the permit requirements as follows. Reports shall describe the deviation, probable cause of such deviation, the corrective actions taken and any preventive measures taken:
 - i. Deviations from the NSPS shall be reported as specified by the NSPS.
 - ii. Throughput in excess of Condition 1.1.5(a) or emission of VOM in excess of Condition 1.1.6(a) within 30 days.
 - ii. Other deviations with a quarterly report. If no such deviations have occurred in a quarter, a report is not required.
- c. Two copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois EPA
Division of Air Pollution Control - Regional
Office
2009 Mall Street
Collinsville, Illinois 62234

1.1.11 Authority to Operate

The affected tanks may be operated under this construction permit until the Illinois EPA takes action on the pending application for a CAAPP permit for the source. This condition supersedes Standard Condition 1.

If you have any questions on this, please call Bob Smet at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:RPS:psj

cc: Region 3